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Title: Discussion regarding Global Warming

MR. SPEAKER: I am sure that we will have a very important debate on this today.

Now, Shri C.K. Chandrappan.

SHRI C.K. CHANDRAPPAN (TRICHUR): Sir, I am very happy to initiate the Discussion regarding global warming today.

Sir, we all know that this is an issue about which the entire world is concerned, and we, in India, naturally have our own share of concerns. On February 2, 2007, the United Nation's Inter-Governmental Panel on Climate Change which groups 2,500 scientists from more than 130 countries released its Report, which is now being discussed all over the world.[R7]

Sir, now this Report of the United Nations actually is raising some of the very important problems to which the entire nation is today paying attention. It says that the very existence of our planet is difficult. If we go in the same way, probably, the future mankind also might be doomed. That is the seriousness of the problem. Now, the issue of climate change is with us a decade ago. A decade ago, it was a conjecture. Now, the future is unfolding before our eyes very serious matters of grave concern. It will be interesting to know some of the aspects.

MR. SPEAKER: Yes, please continue.

SHRI C.K. CHANDRAPPAN : The Report says that the glaciers, especially the Himalayan ones and the glaciers all over the world, the Arctic and the Antarctic, are likely to be melted and the melting process started. If it happens, it has been pointed out that some of the biggest rivers in the world, including some of the most important rivers in India, will have no future. They say that when the Tibetan Plateau gets warmed up, the Bramhaputra that runs from Tibet, passing through different countries, then coming to India, going to Bangladesh and then falls in the Bay of Bengal, may lead to such floods to begin with and then ultimately it might dry up. The same is the situation about Ganges, the holy river. It passes through most of the North Indian and Eastern Indian States, and the Report says that the same thing can happen to Ganges too. It is the fate of Ganga, Yamuna, Bramhaputra, Sindhu and all. So, we cannot imagine such a thing. To begin with, there will be

devastating floods when the melting takes place, and then when it is completely melted out, then a process desertification will take place and the entire Indo-Gangetic plain in our country will turn into a desert, a situation which we cannot imagine or we cannot afford to imagine such a plight that may happen to our country. But that is the situation they have pointed out in relation to our country.

Over and above that, other dangers are also pointed out. When the Arctic and Antarctic ice melting takes place that would bring the water level up in the oceans and seas and if it comes up a metre, then they say, most of the coastal regions of the country, including the great cities of Mumbai, Chennai, Kolkata and so many other cities which are on the coastal regions, all will be coming to an end. They will be all probably going down under the water and people will have to go away. Millions of people will turn homeless, destitute and lot of people will die in such an eventuality. This is the problem in relation to our country that we are worried about.[MSOffice8]

Now, the same thing happens in North America, then Africa and in all the Continents. All over the world, the same kind of problems with different magnitude will be there. When such a situation is there, how are we going to face it? Now, they say this kind of a situation has arisen. The Report puts up the probability of the link between the human activity and the global warming at more than 90 per cent, that is, today 90 per cent is due to human intervention as against 66 to 90 per cent likelihood it had signaled in 2001 in its previous Report. Now, that means in less than 20 years more serious effects have come into being and more human intervention is taking place and playing havoc.

Sir, in such a situation, there were Global Earth Summits in different places, and finally under the UN aegis, the Kyoto Protocol was accepted. They wanted to cap the green gas emission until 2012 but it has been severely weakened since the United States, the top source of green house gases, pulled out of the Protocol in 2001. That is a serious matter.

Before coming to that, I would like to say what exactly the problems that are before us. Global warming is the increase in average temperature of earth and oceans in recent times resulting in a continued increase in temperature in future. Gases like carbon dioxide, methane, ozone, nitrous oxide and sulphur hexafluoride as well as water vapour called green house gases collect in the atmosphere like a blanket stopping the Sun's heat and they radiated off the earth's surface. This is what the Report says about it.

This phenomenon is increasing. It is increasing because of various reasons. High rate of industrialization is taking place; lot of petroleum is used for transport and other purposes; then hydrocarbon is burnt for power generation—all these contribute to the green house effect to be generated in the world and it creates this global warming up which is today threatening the very existence of mankind, the way of life that we have and the civilization that we have built through ages.

In this situation, how we could come out of it? That is a problem that has been under discussion for the last two decades under various UN organizations. Under various multilateral meetings, this problem was discussed. Now, one of the most important reasons that stands in the way

of finding a solution is the highly developed countries which are producing most of these emissions of green house gases.[MSOffice9]

They are saying that 'we have developed a high level of life and we are used to it and the people in the developing countries are not so developed and they need not have to abandon anything that they have achieved'. So, they say that 'let us go the way that we have achieved and let the new countries that are developing not create Greenhouse emissions in the world'. If you put it in other words, what they are saying is that the developed countries, especially the United States that contributes 25 per cent of these gases and things like that, they say that 'let us have our own ways and the other developed countries too are telling to the countries like India that 'you have lot of rice fields; you have lot of cattle wealth; these are all problems that contribute to Greenhouse effect; so you restrict all these and let us have the way in which we live'.

That is again, if you put it in political terms, the old imperialist attitude that let the countries who are striving to come forward not come forward. For those select few countries, the industrialized countries who have gone ahead, they say – 'let us go ahead'. The world could not accept that attitude. They are the G-8 countries and other countries are also there.

How to come out of this situation? This Report has pointed out that we have no time left out to sit idle over this issue because we are almost sitting on a volcano and it may explode any time. Now the world has to take more serious view of this problem. In 2008 or by the end of this year there is going to be a special meeting of the United Nations to discuss these issues. By that time, by November, the Committee that has brought out this Report will come with its final findings and its summing up and all that. At that time, probably countries like India, China and all the developing countries should take a common stand so that we will be able to put across at such an international conference our views in a forthright manner and we will be able to achieve the goals that will come to our interest also and also to the interest of the world.

Now, the Government or India, in this regard, has taken certain steps as they have informed the Parliament. Answering a Question in Parliament the Government said that ten steps have already been taken. This was an answer given to a Question raised in the Lok Sabha. These steps are –

1. Improving energy efficiency and conservation as well as setting up of Bureau of Energy Efficiency
2. Power sector reforms
3. Promoting of hydro and renewable energy
4. Promotion of clean coal technologies
5. Coal-washing and efficient utilization of coal
6. Afforestation and conservation of forests
7. Reduction of gas flaring

8. Use of cleaner and lesser carbon-intensive fuel for transport

9. Encouraging mass rapid systems; and

10. Environmental quality management

This is an answer given in the Lok Sabha to a Question raised on 26.2.2007. Answering my Question the hon. Minister of Environment and Forest has given these details.

These are some general statements. Now, we will have to go into some more specifics. When the Report says that the glaciers are in danger, there are reports that the Government of India has not, so far, studied in depth the problems the glaciers might face. [MSOffice10]

As reported, there was a proposal to set up an institute to study the problems of glaciers, but that institute has not so far been instituted, or if at all it is instituted, it is in a very preliminary stage. No concrete work has been done. That is one area where our interest is lying. If that institute is to be set up, seriously set it up. The answer that the Government has given shows its non-seriousness. It says that there are not sufficient qualified persons in India for running that kind of an institute. When there is nobody in India, then find people from abroad, but I think, there are scientists in India who are capable of running such an institute. This is very important in the context of this Report and it points out that the glaciers are in danger and that is going to affect the most important rivers in this country. So, that institute should be set up and serious study on that aspect should be done.

Secondly, there are lot of complaints about the kind of energy that we are producing. This Report also points out about it. It does not point out only about us, but about the developing countries. When we produce energy, it is not very clean energy that we are producing. We use coal and things like that in a fashion that it creates greenhouse effect. So, we have to evolve new technologies or new methods by which we will use our resources in such a manner they would not contribute to greenhouse effect. We have a lot of coal resources, but they should be used in such a manner that they would not contribute to greenhouse effect. That requires a lot of research and studies. No serious effort is being made in that respect too.

The third thing pointed out is that the number of vehicles has increased. Now it is a status symbol that every house has three or four cars and things like that. There was a time when we used to promote mass transport, public transport system. When it is essential a person may use a car. Now because of the liberalised import policy, the globalisation and all that, there is competition of bringing in more and more vehicles and if possible, much bigger ones which consume lot of petrol or diesel and then show them off. The Report on Global Warming says that efforts should be made to strengthen the public transport system and other modes of transport should be discouraged. That is a question of certain policy to be enunciated by the Government. So, what I say is, on that issue, we should provide mass transit arrangement, which may be trains, Metros, even buses or whatever. Now in Delhi, because of the court's verdict, finally they have switched over to the use of CNG. That is a good thing. Such things should be encouraged to the maximum.

Then, we should see that our contribution to the greenhouse effect is less. The argument from the other side is that we cannot just ignore the argument from the other side. I said that 24 or 25 per

cent is the contribution by the USA. Next comes China. The third one is India. In terms of quantum, what we are saying is that our *per capita* contribution to greenhouse effect is less because of the population and ours being a vast country. But even then when our economy is growing fast and if you are to keep this present rate of economic growth and want this pace to continue on a sustainable basis, then probably, we will require more energy.[s11]

More energy would mean that we will have to use more fissile materials. As I was pointing out in the very beginning that if you do this, then its contribution should be made less. We should use more scientific and technically correct methods by which our contribution to the greenhouse effect will not be that big. We can always say that countries like the United States and other industrialised countries -- who are very much developed -- should bring down their contribution towards the greenhouse effect. This is all that the Kyoto agreement said, and the United States walked out from it protesting this.

It is again a question of how much responsibility they should take to save the globe as a whole and the mankind as a whole from this crisis. If you look back at the history, these industrialised countries and imperialist countries in the post-industrial revolution period established colonies, and they amassed a lot of wealth from the looting that they made from all over the country.

The Non-Aligned Movement all the time wanted that a part of the money that they have been looting for ages from us should be shared with us so that the backward countries and the developing countries can also keep pace with the development that they have achieved apart from the political freedom, which we have achieved. This is the time that we should insist from them to spend money to bring down their own greenhouse effect, and also help the developing countries to achieve greater efficiency, achieve growth by minimising contribution of their greenhouse effect. This is a political approach, and if that has to be achieved, then India should probably take a clearer stand on its international policies. India should once again become the leader of the Non-Aligned World; rally the entire Non-Aligned countries with us; all the developing countries, especially, countries like Brazil, South Africa, Mexico along with China should be brought with India to strengthen our case. Thereafter, we can argue that more than a 100 countries stand along with India, and argue for the wellbeing of mankind. If the Government of India takes such a position in its foreign policy perceptions, then that will be a good contribution.

I would like to make one more point. It was reported in the *Indian Express* that the Prime Minister Office has entrusted this job with the Commerce Ministry and the Industries Ministry. It is good, but that is not enough. This is not a thing that should be tackled by the Commerce Ministry and the Industries Ministry. I can understand if a Group of Ministers headed by the Prime Minister with a team of the best scientific brains are asked to look into it. They should be brought along with a team of economists, environmentalists, etc. and that Committee should formulate India's policy in relation to different aspects of the problem, namely, the manner in which we are going to tackle it. If the Government is taking such a stand, then I am sure that India will play not only a role by which India's case is advanced, but India will play the traditional role as the leader of the developing countries; leader of the Third World countries; leader of the poor countries; so that the whole world will be saved in a big way. [r12]

This is the last word – if we neglect this, the sufferers ultimately will be the common man. If the water level rises in the oceans and seas, if desertification takes place and if floods take place, the worst victims will be the common man in this country.

So, keeping in mind the special requirements, the Government of India should act speedily, effectively and with a sense of determination and with a political direction. This is what I would like to say while initiating the discussion.

SHRIMATI MANEKA GANDHI (PILIBHIT): Thank you for giving me this opportunity.

Sir, I know that you are personally extremely interested in this debate and that you have initiated a large number of MPs to see a film by Al Gore. I would also recommend every Parliamentarian to see it. Gore, so that we pass the point of talking politics. This is no longer a matter that concerns the developing or the developed nations, the non-aligned or otherwise, rich or poor, etc.

It is a problem that has no class distinctions. If anything, it hits the middle and the upper classes, and not just the so-called common man – In fact, I have never met a single common man in my life. So, it is a problem which the upper and rich classes will face much faster because their quality of life will deteriorate the most. This is not a problem that can be solved by simply throwing money at it. The Government will have to do some intelligent thinking and do it fast as we are already 20 per cent into this crisis.

The hon. Member who spoke just now, has gone on and on about having an Institute on Glacier Management. You cannot manage the glaciers. The glacier is affected by carbon dioxide and other gases in the air, which are called the Greenhouse gases. If you cannot control the level of CO_2 in the air, you cannot save the glacier, even if you have 50 such Institutes with everybody sitting in them.

Before I begin, I have to say that I am despondent because the Minister who will be responding to this debate or the Minister who is put in charge of listening to this debate from the Government side is the Minister of Environment. This has nothing to do or this has very little to do with the Ministry of Environment. I feel that the Minister of Power should have been here; the Minister of the strangely-named 'Alternative Energy' should have been here; and the Prime Minister should have been here because this is not something that can be done by the Ministry of Environment.

We are already into the crisis, and it is not that if this happens, etc. it is simply a question of when it happens! It will accelerate in the next five years. There will come a time, in the next ten years where it will be irrelevant whichever party comes to power and the word democracy will be irrelevant when people rush to grab whatever available resources are left.

There is coming a time soon, when the squeeze of people into the central parts of India will be so great that the rule of law will simply disappear; and I promise you, hon. Members, this will

happen in your lifetime! In fact, if the projections of the scientists are correct – they had been absolutely correct so far in their milestones – this may be the last few years that India exists as a State with any form of governance. We are now rapidly becoming a Government that simply ignores crisis or responds to it in a knee-jerk fashion while hoping that it will go away. This is not going to go away. We are already in the middle of it.

In my own constituency, in April, which is a hot month, we had hailstones the size of a tennis balls which destroyed the entire wheat crop in the Tarai. We had snow in places where snow had never been. We had snow late; we have flowering late and we had lost large number of crops due to flooding. This is going to increase year by year.

If you look at the satellite pictures of India, you will see a sharp erosion of our coasts. Already several islands in the Sundarbans had disappeared and the people living on them have had to move inland. In one particular island, 600 families had to move inward when the entire island, like Dwarka, had disappeared under the Ocean.

As land along the coasts disappears through a combination of rising waves, tsunamis and cyclones, India's coastal people and Bangladeshis will start moving inwards and this means, crores of refugees coming into India. [MSOffice13]

Then as the heat starts increasing, which it is already doing, this means the break down of power for large masses of people and millions of deaths. It also means famine on a scale that cannot be comprehended because there will be no nation and no State that we can import food from. And all this will happen in the next ten years. The indicators are all there. In fact, one of the most important indicators has gone unnoticed; the dying out of pollinating agents such as bees and butterflies on which our entire planet depends.

This is not a crisis that can be tackled by admonishing people to use less water, less energy or to keep their homes clean. It cannot be tackled by show displays of planting ceremonial trees. It has to be done now by a series of policy changes and fiats by the Government that act now and are enforced for the good of all. I am going to suggest a few things which if taken up now can perhaps mitigate some of the disaster.

One of the problems, as Al Gore also pointed out, was the fact that nations blame each other, people blame each other and there is a sense of despondency that I cannot do anything or that Governments cannot do anything. There is absolutely no point in saying that America is responsible since China and India are equal in their responsibility and are increasing their part in global warming. Therefore, these are the suggestions that I have to make.

- Government must lay more emphasis immediately on wind and solar power.

In the world, Sir, to date, only two per cent of all power production is being done through renewable energies; two per cent in the entire world of which India has 'zero' contribution to make. We must also lay emphasis on the production of vegetable based fuel for vehicles. Diesel and petrol must be consciously phased out with short term goals. Instead of the Minister answering, as he did the other day, that five per cent Ethanol mixes will come in the next ten years, you do not have ten years. At the moment the Ministry for Alternative Energy, which in any case is strangely named – it should be Renewable Energy and not alternative energy – is considered a joke because the entire wind energy production, and there is a very little of it, is being done by the private sector and there is no solar energy being produced at all. We have to go for decentralized mixes of energy. The day of the coal-based power plant is over. You have to have carbon neutral energy and this can only be done by renewable. It reminds me of the Chinese executioner's story. There was an executioner in China who was so good at his job that when he cut the head off, the victim did not know his head had been cut off and, therefore, the executioner after he wielded his sword would say please nod and then only the victim's head would fall off. We have reached a point where the executioner has simply got to say, 'please nod' our heads are already off when it comes to petroleum and diesel.

- Tree planting must be done on a war footing with appropriate trees.

It is not good enough to say that we have 20 per cent forest cover because this is mythology. Why is it mythology? It is because we are taking averages. We are taking 35 per cent of the North-east and averaging it out with 1 per cent of Punjab, 2 per cent of Haryana, 1 per cent of Maharashtra, 1 per cent of Delhi and then call it an average of 20 per cent. Let us suppose North-east ceded from us, then we are left with 1 per cent average in the rest of India because we are losing our entire averaging base. Therefore, let us not look at averages any more and go for 20 per cent in each State immediately.

Forest Departments must stop cutting trees as a means of supplying the State with quick money. There should be a moratorium for at least ten years because there is no planting going on, but there is large scale depredation both by the Government officials, the poachers unofficially, the villagers for cooking and the cattle for grazing. There has to be a policy now that all paper will be made with bagasse or other agricultural waste. I do not mind reading a newspaper which is slightly brown in colour if it means that I have my life still available to me.[R14]

Fourthly, you will have to rethink your policy on car production. Low emission vehicles have to be ordered and the standards raised very high. No emphasis has been put on public transport as the hon. Member pointed out. Uttar Pradesh, for instance, has been packing up its buses for years and so has been Bihar. None of our roads in any city are bicycle friendly. Therefore, people per force abandon their bicycles.

Fifthly, energy efficient appliances have to be the order of the day. Simple things like standby modes have to be removed from all appliances like Computers, TVs and videos. A standby mode consumes 98 per cent of the energy used by the video and TV. I would suggest starting with a special labeling on each appliance and immediately the Government should order that all lighting to

CFLS and the banning of standard yellow bulbs. This in itself will take us some way away from total destruction. This will make an immediate difference.

Sixthly, most farmers in India burn their field after crops like sugarcane and wheat are harvested. As I speak, all the fields in my Constituency are on fire and mine is not the only one. If you travel in North India in a helicopter you would find that everything is on fire. Let us put it conservatively, 20 lakh farmers burning fifty lakh acres a day. That is what is happening now in just one small Constituency. This increases the heat sharply and the SPM level. I had banned crop burning in my Constituency and it had an immediate effect in heat reduction. However, the ban did not hold for more than two years because there are no laws to support it. Most fields in Uttar Pradesh and Bihar are on fire as I speak. The carbon dioxide levels, the pollution and SPM levels have to be felt to be believed, so high do they rise. This is what is causing the melting of your glaciers. Not only are precious organic material being burnt which could have been used for crop, which could have been used for animal grazing but this, more than anything, increases the heat and instability of the weather. This has to be banned immediately. Along with this, the ban on forest burning in the name of preventing forest burning has to be stopped. I have urged the Environment Ministry, which is really as much of a joke as the Alternative Energy Ministry, to issue a ban. For the last one year, they have been pondering on how to frame the letters to ban this.

We will have to think very strongly about industries that are doing harm. When you talk about America picking on Asia, this is incorrect. They may be or they may not be. I am not going into the politics of that. But Asia is contributing as much methane which is as important a green house gas as carbon dioxide. The entire methane production is coming from developing countries in Asia and Brazil. The reason for this is the emphasis on cattle production for milk, meat and leather. If you do not take care of the methane no matter how much we reduce the carbon dioxide you will still achieve the same level of green house gases. Each age has to phase out those processes that destroy the whole. This, and the pesticide industry which is causing an acceleration of heat production, water usage and pollution, will have to be mandated by fiat now.

We will have to think in terms of reducing the population. This has been avoided politically for thirty years but it is now the national imperative. Otherwise, this will be a nation ruled by catastrophe - that is, if it remains a nation at all. I urge the government to take this matter seriously and to rearrange their priorities to tackle the life threatening situation that exists now.

SHRI SANDEEP DIKSHIT (EAST DELHI): Sir, we are undertaking an extremely important discussion today. Shri Chandrappanji and Manekaji have very eloquently and very nicely painted the picture as to what really is happening. I have only one change to make to what Manekaji has said. She said that probably in another ten years time, this catastrophe is going to befall us. I believe, it is already on our heads. I think, it has started. There are simple things that we are seeing all around us. Most of us are assuming that these may be the symptoms of what might come in some 10 or 20 or 30 years time. I think some of them are pointing to things that will happen howsoever you may try

to stop them. What is happening to the glacier is something has caught our imagination. It has caught our imagination because somewhere down the line we believe that the shrinking of glaciers is going to make a major impact of our major rivers. We believe that the melting of glaciers is going to reduce the drinking water availability that we have. It is going to reduce the productivity in crops. It is going to initially lead to flooding and later on to dry lands and arid zones all across India. Some of them have already started. The way most Governments are reacting, including our own, I get the sense that either we are not seriously seized with the problem, or, as has been mentioned by Smt. Maneka Gandhi, we perhaps believe that it will be wished away. If you continue to do a little bit of tool kit technology in most of the things, something will happen and somehow we will survive. I do not think that the problem of climate change, what is going to come out as global warming, can really be wished away. It is something that we collectively have achieved over the last 100 years or 150 years. Most of it is attributed to what has happened in the post-industrial scenario from the 1850s and 1860s. All indicators, whether it is on Greenhouse gas emission; whether it is on temperature; whether it is on glacier; whether it is on what is happening in the Arctic sea; or whether on the impact of Greenland ice cap, everywhere the indicators are showing without any doubt that something is happening in this globe and it is going to cause a catastrophe. Yet I still feel that we are not being able to rise above debates.

Sir, here I would like to point out a particular extract of a paper that I read recently that was submitted to the Office of the Prime Minister.

15.47 hrs. (Shri Balasaheb Vikhe Patil *in the Chair*)

I was horrified to read some of the lines of that Report. This was the Report of the post Inter-Governmental Panel on Climate Change. One good thing about the report of the Inter-Governmental Panel on Climate Change is that everybody suddenly has been shaken a bit; even those who believed that such a problem did not exist were forced to believe that perhaps somewhere it is happening. The Report that talks about climate change in Indian agriculture has asked as to what is the scenario of climate change in India. This is based on a NATCOM Report that the Ministry of Environment and Forest has produced. It says that according to the Report there has not been any substantial change in warming in India. It says it does not find enough evidence to see that there have been changes in the monsoon rainfall pattern. It does talk, of course, about some minor changes in the Himalayan glacier. I sometimes find it difficult to understand that as the Report goes down it initially denies what most of the other international reports are talking about globally and therefore affecting India and then finally it very reluctantly admits to some of the changes that might be happening in this country. It says that monsoon rainfall at Indian level does not show any trend, but there are some regional patterns. The surface temperature from 1901 to 2000 indicates a small warming over the past 100 years and distribution of temperature changes indicate a warming trend that has observed only along the West Coast, Central India and in some parts of the interior Peninsula. However, cooling has been observed in some parts of North-West India and South India.

Sir, I do not think that Governments in Asia or international bodies are seized with the problem. The problem is immense. The solutions to the problem are very serious. Smt. Maneka Gandhi has pointed to many of them very eloquently in here address. But there are many more.

There are technologies exist that can help us to transport. There are technologies exist that can work in industries to produce goods, produce consumable items and produce little electrical gadgets that we are using that consume less electricity and emanate less heat. [R15]

There are already technologies available that can even help in making paddy cultivation much more environmentally sustainable. There are already indications available that we need to give market signals through taxation, through prohibitive policies to stop production and usage of some kind of machines, to bring in a taxation regime or a disincentive or incentive regime that forces Government, the private sector and the citizens to be environmentally sustainable. But is there a will to do it?

I do not want to go into all the aspects of it because Shri Chandrappan and Shrimati Maneka Gandhi have also very clearly articulated all the problems that are associated with global warming. There are many more on this issue and we can just keep counting them. There are huge number of reports that have already come out and available everywhere in the public domain. Is our Government, like all other Governments across this globe, serious about tackling this issue? I personally feel, as a person who probably have 40 more years to live in this nation, that this Government is not serious about it. I am saying this with a lot of humility. I do not think that most of our leadership is really very serious about it currently. Something somewhere seems to be missing when we come to debates on environment. It is almost a month since the last report came out by United Nations. It was flashed all across in the newspapers. In the last one month only, we have seen the kind of urgency that is there in at least in people's mind. This is the second time that this House is talking about global warming. But is our Government equally aware of it? Is our Government rising up to the occasion equally? Are our State Governments aware of it? Not at all. I think if the Government of India is aware at a scale of two out of ten, the State Governments are aware at half out of ten. They do not even know what is happening. I am aware that many State Governments, in fact, are looking at issues that might affect some of the activities which they may be taking on, which is leading to their industrial growth and that should not be stopped because of this. It is the same argument that the United States talks of when it talks of its own growth.

I think a very important point which Shrimati Maneka Gandhi has made is that it is no longer a fight between the developed countries and us. There is and it will be like that. It is an emotional issue. We feel that why should we not go through the same path as somebody else has gone through. Why should we not have the same level of life style, quality of life and development which the Europeans and the Americans have? Why shall we not go through the same path of economic growth that they have? Why should we start controlling ourselves and they refuse to control themselves? Sir, this is a debate which nobody can answer. Are we really interested in putting our earth right? If we keep waiting for the other person to take a step, ultimately nobody may take that step. Are the life styles of the United States or the Europe ideal? Is the growth path or the economic development of the West ideal? Certainly not. I do not think that the West believes in that, I do not think that NDA truly believes in that and I do not think we truly believe in that. Is that the only way that most of us have to go through? Is that the only way available to us?

There are a lot of things happening in research and development. The other day, Shri Kapil Sibal, when he was talking about his Department's work on his Budget, spoke a large amount of work that the Department of Science and Technology is undertaking. In fact, he mentioned about global warming and stated how, in many areas, his own Department is funding research that could help reduce global warming impact across the globe. But are these being taken out to a serious level that is possible?

We talk of mass rapid transport. Apart from the fact that the Government of India may have apportioned funds for mass rapid transport. Certain cities like Mumbai, Chennai, Delhi and few others may have looked at metro and said that they would like to have metros. Is it something that is imperative now? Why not all the State Governments thinking of nothing but metros in their areas and stop expanding and stop putting money in other infrastructure?

As regards cars, there are many other things these Governments have banned. There are many other things that we have stopped people from consuming. There are many others which the Governments have gone out of their way to stop people from getting. Why cannot it happen in the case of cars? I do not know whether such a technology is available that can make cars as environmentally sustainable as it is required. But certainly, there can be measures for a certain kind of consumption with certain kind of lifestyle issues which Government must be serious in controlling if they are seriously thinking about environment. Somewhere we have to signal to ourselves and to all our citizens that certain steps need to be taken. The steps are available.

I am not an expert standing here to talk about those steps. There are many people in this House who know much more than me about what steps to be taken. There are many people in various universities and institutions across the country who know what steps need to be taken. But will we take those steps?

The impact of climate change is going to affect each one of us, whether we sit on that side of this House or this side of this House or whether we sit in this House or not. It is going to affect each community; it is going to affect each caste; and it is going to affect each region. If Tamil Nadu is going to be affected, then Uttar Pradesh is going to be equally affected; if Rajasthan is going to be affected, then Manipur is going to be equally affected. If Ganga is going to start drying up in another 25 to 30 years, then Brahmaputra will also – perhaps initially start flooding -- start drying up after 25 to 30 years.

Mr. Chairman, through you, we want to really request the Government hat we have to stand up and probably take this as the most important national issue today. We have spoken about certain issues beyond politics. This is an issue in which politics will not come anywhere. I am sure all Members in this House, all legislative assemblies across this country, once taken into confidence, once told what is coming in front of us, would certainly stand up and fight for their citizens.

If it means stopping certain activities, I think, we must go ahead with them. If it means banning certain technologies, I think, we must go ahead with them even if we do not have alternatives right now. To continue to keep waiting for alternative technologies to replace certain existing technologies is not good. May be we will get them too late. Shrimati Maneka Gandhi said

we have fifteen or twenty years to go. But I believe that we have five to six years to go to take our policy choices. We have only three to four years to go to give a signal to our country that our mindsets should change. It will take at least ten to fifteen years for people in this country to start realizing that may be there are differences that they need to make in their life styles; there are differences that they need to make in their choices; there are differences they need to make in the consumption patterns that they are getting on with. Most of us who represent the consuming class in this country should take a lead in this.

Mr. Chairman, I have brought a lot of figures to talk about; and I have brought a lot of Reports to talk about. But when I understood and realized that most of them are already available, I thought, I should restrict my entire submission to this one plea that we have to take this seriously.

The Government must set up a panel at the Prime Minister's level or at the Planning Commission level or at an all-party level. This is something in which urgent steps are required. The Government has to step up and first convince us, the Members of Parliament who are sitting in this Chamber, that the Government is serious about it. Seriousness will not come through words; it has to come through immediate and urgent action in the coming one to two years.

Please tell us where we need to discipline ourselves; tell the citizens where they need to discipline themselves; tell the Government officers where they need to discipline themselves; tell the private sector where they need to join in this whole issue. Then, our farmers will join; our workers will join; our wives will join and our children will join. I know that environment is an issue where every child in this nation will come forward to contribute.

I end my speech by really pleading to the Government to please rise to the occasion. If it has the will, there is nothing that the Government cannot do. In sixties and seventies when this country was faced with the food shortage, it decided to embark on the path called "Green Revolution" -- whatever may have been the subsequent impact of that in terms of environment – and it showed what it can achieve.

This is a time when as a nation and as a Government we need to stand up and for the coming years and for the coming generations save this Earth. Thank you.

DR. SUJAN CHAKRABORTY (JADAVPUR): Mr. Chairman, Sir, I believe, as all others here, that this is one of the most important issues that the country and the whole world is confronted with today. A lot of figures are available with us today to show how, within the interval of five to ten years, the global warming has increased and how it is impacting us. All these figures are available in the net and I believe these figures are available for the Members also. So, I will not concentrate on figures.

The important issue is the mindset of the Government with regard to policy, planning and the will. The three Members who spoke before me also spoke on similar lines.[MSOffice16]

16.00 hrs

This is an issue where barring one or two points, I believe that the entire House should agree in a single tune. From that end, we should look into the issues.

Sir, it is not the question of figures and it is not the question of facts only. The experience these days also is guiding us that the change in nature of weather is experienced by all of us. So by experience, it is understood that the different parts of the country are becoming warmer and more erratic behaviour of the nature is already understood. There is no rhythm for the storm also. No older systems are being followed neither in our country nor in the international arena. In the USA also during the last few years, some catrastrophies took place. So all these are the signals and all these are actually reflecting as to how the change is having an impact on the population. The climate change and the global warming will have impact on many issues. It will obviously unbalance the existing balance of the nature. It will definitely have effect on glaciers melting down, thereby a definite rise of the sea-level and thereby obviously drying of number of rivers. Habitations in different areas including the small island States will be at stake. Those will be drowning, displacement will be there, droughts, food crisis, health hazards and a lot of issues are involved. The issue basically is on the future of the population, on the future of the world. That is getting in crisis because of the entire change in the climate. Why is it so?

16.02 hrs. (Dr. Satyanarayan Jatiya *in the Chair*)

Sir, the nature has its own inherent balancing approach. Yes, the emitted carbon dioxide is again being consumed by plants and thereby oxygen is emitting which again faunas are using. This balance is there and the nature is having its own peculiar balance. Whenever we are hitting nature very detrimentally, nature also is hitting us back. That is the simple question. Than the pre-industrial period, it is already having a concentration of 37 per cent more carbon dioxide in the nature and that obviously is having its very negative effect in the climate, in the warming etc. The question definitely may come, if the question of industrialization is linking to this sort of development, how we should look into the question of industrialization, how we should look into the question of development etc. There is a trend to juxtapose development and environment. I believe that is not the solution or the real answer. It may be that some of the countries in the world also are trying to drag us that way and maybe some of us also are thinking that in the issue of climate, we should not enter into the politics. This is not the question of politics. This is the question of reality.

We have to understand as to why a thing is happening and if we do not try to look to that very specifically, we cannot even answer the problem. So it is just not the question of politics of developed countries or developing countries. Development is a reality, poverty alleviation is a must and as late Shrimati Indira Gandhi had also commented, probably in the same fashion that the poverty itself is the greatest pollutant. That is true. We must have arrangement for that. But how, why and what sort of technology we have to use, those obviously will be the questions. It cannot be

that as if development and environment is one opposing the other. How best we can arrange for the development keeping in mind the environmental arrangements should be the most important issues.

Sir, you might be knowing as the newspaper reports that President George Bush rang up our hon. Prime Minister yesterday. … (*Interruptions*)[a17]

It is with the claim, with the opinion that India should limit its emission. It is true. But who is contributing to it? How much is contributed? How much is being contributed by which country? This is not a question of politics. It must also be seen very categorically.

Today, in the world, the contribution of carbon-dioxide emission by the US is more than 30 per cent. The *per capita* contribution is the highest; it is much more beyond imagination. In India, it is much less. I do not say that we have still got nothing to do. We have still got something to do. That is a separate issue. The whole of Asia, which is having more than 50 per cent of the world population these days, is contributing only to the level of 12 per cent. Again, how can that be still limited? We can think of that. Can the USA dictate today, which, even today is not signing the Kyoto Protocol? Can it be accepted? If this question is raised, will it be branded as politics? If this is the position, it must be done. Without this sort of politics, without this sort of fixing up of responsibility, I believe, the solution cannot be sought for. Further, the responsibility should also be fixed.

Shrimati Maneka ji was referring to one Island, in the Sundarbans which is drowning. People have already been evacuated because of climate change. Yes, it is a very small Island. People have been evacuated in the name of *Lohachara.* But that is not due to climate change. Now we are trying to mix everything for the purpose for which we are speaking. That should not be so. Some other reasons are there. The scientists should look into that aspect. There is no problem.

Basically, the question still remains, how can the green-house emission be lowered? But still it is already 37 per cent in excess. How can that excess be reorganized in this system so that the effect can be lessened? I think these two aspects should be seen properly.

There was a question of transportation. Everybody has said about it. It is a question of development. It is a question of liberalization even. It is a question of trying to be big and engulfing anyone. Therefore, the question of transportation also comes. The question of energy is also there. My point is that the public transport system is a must in our country. Wherefrom has it to start? We cannot just say: "Let the economy be liberalized but the transport system must be public ended." It cannot be. These things will be linked with the entire economic policy that the country is going to pursue. But I understand that the question of public transport system obviously shall have to gain much more importance.

Next, the question of energy comes. In our country also, we are using basically the thermal system, the fossil fuel system. It is a huge one. In the Tenth Plan, it was proposed that the 60:40 balance should be maintained. Where are we? We are much below. About 18 per cent is our hydro and other systems. Fossil fuel is contributing to the extent of 82 per cent. It was proposed in the Tenth Plan also. But I believe the question of energy and clean technology is very important. The

question of fuel cell is there. Should it not gain the topmost priority in the country today? Then, the question of solar system, solar cell is there. Should not solar energy have the topmost priority today? Should we not organize mission mode to which I will come later on. It is just not a question of environment. It is the question of overall development and thereby in terms of development, the question is how best we can utilize science and technology.[R18]

The important point is, how the Government is going to look into these issues. It is not the question of just one Ministry or Department or what the Environment Ministry is doing. It is the question of clean technology, solar cell, mission mode and most importantly, all these issues should be taken into consideration.

Similarly, there is the question of carbon trading. There are a lot of technologies that are available now. Some of my friends have been talking about energy efficient technology. It is already available in the country. Who will make it popular? The mindset of the Government and the policy makers have to change. We have a lot of scope and we have a lot of technologies. Some 'dos' and 'don'ts' have to be fixed by the Government and they must be integrated into the whole system. From that angle, I would urge that the issues of fuel cell, solar cell and energy efficient technology must be given importance.

Sir, still 37 per cent carbon dioxide is in excess in the system. We have to see how best it can be minimized. If India cannot do this, no country in the world can do it. India's biodiversity is huge. India's basic understanding of science is also great.

MR. CHAIRMAN : Please conclude.

DR. SUJAN CHAKRABORTY : I am concluding.

We have a huge biodiversity in our country. I do not find any reason why one of our main attentions should not be on biotechnology and we should see that flora development is made in a manner that it consumes much more carbon dioxide from the system. Now, carbon dioxide emission is more than the flora can consume. But can biotechnology not help us in this direction? Since our biodiversity is huge and our biotechnology potential is very strong, I believe that this is one area where we should pay more attention.

Sir, I am not going into facts and figures and extracts of various reports due to paucity of time. We know the problem. We have to find out a way to solve it. The Ministry of Environment and Forests must be making efforts in its own way to control emission, but it is not just the question of the Environment Ministry. It is a question of sustainability of development and also a question of best utilization of science and technology. So, it is not just the responsibility of the Ministry of Science and Technology or the Ministry of Environment and Forests, but the Government, as a whole, should pay more attention towards these issues.

Therefore, it is not just the Minister of Environment and Forests or the Minister of Science and Technology who should reply to this debate today. If the Government feels that these issues are

important, then this debate should be replied to by no less than the Prime Minister and that can be the answer to the world to say that we, as a nation, are very serious about these issues. So, these issues should be viewed very seriously from that angle.

With these words, I conclude and I thank you for giving me this opportunity.

श्री रवि प्रकाश वर्मा (खीरी): सभापति महोदय, आपने एक बहुत ही महत्वपूर्ण विाय पर मुझे अपनी बात रखने का मौका दिया है। आज हम लोग, जो वायुमंडल में आये दिन परिवर्तन आ रहे हैं, उस पर चर्चा कर रहे हैं। मुझसे पहले कई माननीय सदस्यों ने अपनी-अपनी बात रखी है और गम्भीर चिन्ता के स्वर उठाये हैं। मैं उन सब के साथ अपने विचार जोड़ते हुए अपनी बात कहना चाहता हूं।[R19]

महोदय, यह एक ऐसा विाय है जिस पर सदन में कोई मतभेद नहीं है। सदन ही नहीं, हिन्दुस्तान में और हिन्दुस्तान के बाहर भी, इस बारे में सम्मिलित रूप से चिंता के स्वर व्यक्त किये जा रहे हैं। मैं महसूस करता हूं कि अंतर्राट्रीय स्तर पर भी इस बारे में गंभीर प्रयास किए जा रहे हैं, हालांकि अभी इस विाय में बहुत कुछ किया जाना बाकी है। वायुमंडल में परिवर्तन एक ग्लोबल इश्यू है और यह केवल एक मुल्क के सहारे या एक मुल्क के विचार करने से चल भी नहीं सकता।

धरती पर रहने वाले सभी लोग, हवा, पानी, समुद्र या धरती के सहारे किसी न किसी प्रकार से एक-दूसरे से जुड़े हुए हैं। अगर पूरा का पूरा पर्यावरण परिवर्तित होता है, समुद्र का स्तर उठता है, ग्लोबल वार्मिंग की समस्या पेश आती है, तो उससे पूरी मानवता खतरे में पड़ती है - इस चीज को कोई नजरंदाज नहीं कर सकता है। मैं समझता हूं कि संयुक्त राट्र संघ ने भी इस बारे में कुछ पहल की है और कई प्रोटोकॉल साइन किए। इससे पहले, जब लोग इस विाय में ज्यादा कुछ सोच भी नहीं पा रहे थे, तब कई साल पहले ग्रीनविच सिटी में धरती के दो महान विद्वान मिले थे। उनमें से एक सर अर्नाल्ड ट्राइनबी थे, जिन्होंने इस बात का अध्ययन किया था कि धरती से सभ्यतायें क्यों खत्म हो गयीं और दूसरे दाइसेयुकेला थे, जो पूर्व के जैन संप्रदाय के प्र वक्ता रहे हैं। एक पूर्वी सभ्यता का प्रतिनिधि और दूसरा पश्चिमी उपभोक्तावादी सभ्यता का प्रतिनिधि, जब दोनों ने कई दिनों तक मिलकर बातचीत की और ग्रीनविच सिटी में विचार-विमर्श किया तथा मानव जीवन के सभी पहलुओं पर बड़ी गंभीरता से उन्होंने चर्चा की, तब उन्हें लगा कि कहीं न कहीं, धरती पर जिंदगी और पूरी मानवता खतरे में है। फिर उन्होंने सम्मिलित रूप से एक डाक्यूमेंट जारी किया और जो उनका डॉयलाग प्रकाशित हुआ - Man himself must choose - मैं समझता हूं कि इसे सभी लोगों को पढ़ना चाहिए। उन्होंने इस समस्या के प्रति बहुत गंभीर स्वर व्यक्त किए थे कि पूरी धरती पर मानवता और सिविलाइजेशन को बहुत बड़ा खतरा बताया है। हमारा कर्तव्य है कि सभी लोगों को जागरूक होकर प्रकृति के मूल्यों की रक्षा करनी चाहिए, वरना इस धरती पर सभ्यता कायम नहीं रह पाएगी। मेरे ख्याल से यह पांच, सात या दस साल पहले की बात है। आज जब हम इस चीज पर गौर कर रहे हैं, तो हम इस बात से अलग नहीं रह सकते कि हिन्दुस्तान में अतीत में भी इस अनुभव को महसूस किया गया। हम इस बारे में किताबों में पढ़ते हैं। बाबरनामा एक ऐसी किताब है, जो उस समय की हमें जानकारी देती है। जब बाबर हिन्दुस्तान में आया था, तो उस समय यह दर्ज किया मिलता है कि वर्ा 1500 के आसपास उसने पेशावर में गैंडों का शिकार किया था। पेशावर आज की तारीख में रेगिस्तान है, केवल कुछ सौ वर्ाों के अंतर में ही, हमारे मुल्क से जुड़ा हुआ थोड़ा सा हिस्सा, जो एक समय लशग्रीन वैली हुआ करती थी और कहा जाता है कि वहां गैंडे हुआ करते थे, लेकिन आज वहां रेगिस्तान है, इसलिए मैं कहना चाहता हूं कि हमारे सामने यह एक चेतावनी है, जो हमें बहुत पहले महसूस कर लेनी चाहिए थी। चार हजार साल पहले हमारे यहां भी एक विलुप्त प्राय: नदी सरस्वती थी, जिसके बारे में रिसर्च भी चल रही है। यह कहा जाता है कि उसके किनारे एक बड़ी सभ्यता फैली हुयी थी। वहां ऋाि-मुनियों के आश्रम थे और वहां रिसर्च-वर्क होता था, लेकिन आज उस सभ्यता का कहीं नामोनिशान भी नहीं मिलता है। आज इतिहासकार कहीं-कहीं उसे ढूंढने का प्रयास कर रहे हैं। ये दो बड़े अनुभव हैं जो केवल हिन्दुस्तान के निवासियों और हिन्दुस्तान को बताने के लिए पर्याप्त कारण रखते हैं कि हमारी लापरवाही या इस संदर्भ में उदासीनता हमें कहां तक पहुंचा सकती है।

महोदय, मैंने कुछ समय पहले अखबार में पढ़ा था कि प्रोफेसर क्रिस्टोफर लैटिन, जो कि इंग्लैंड में ग्लोबल एक्सटर्नल क्लाइमेट चेंज नामक संस्था चलाते हैं, उन्होंने इस बात का मूल्यांकन किया कि पूरी धरती के ऊपर जो कार्बन एमीशन है, उसकी

तादाद आठ बिलियन टन है, जो बहुत तेजी से आगे बढ़ रही है। हमारे वैज्ञानिक जानते हैं और माननीय सदस्य भी इस बात को जानते होंगे कि इतनी बड़ी कार्बन एमीशन की तादाद धरती नहीं पचा सकती। एक तिहाई कार्बन एमीशन को हमारे ठंडे समुद्र और पानी अब्जार्ब कर लेते है और वह फूड चेन का हिस्सा बन जाते हैं, जबकि एक तिहाई कार्बन एमीशन को हमारे पेड़ पौधे फोटो-सिंथेसिस के माध्यम से अब्जार्व कर लेते हैं। [c20]लेकिन जो बाकी का बचा हुआ एक-तिहाई कार्बन एमिशन है, वह कहां चला गया। अगर उसकी तलाश की जाए, तो आज जो ब्राउन हेज़ पूरी धरती को घेरे हुए है, उसमें कार्बन डाइऑक्साइड, मिथाइल और बहुत सी दूसरी गैसेज वाटर वेपर्स के साथ हैं। यह वही बाकी का बचा हुआ कार्बन एमिशन है जो पूरी धरती की जिंदगी प्रभावित कर रहा है और जिससे उत्तरोत्तर तापमान की बढ़ोत्तरी हो रही है। इससे ग्लेशियर पिघल रहे हैं और बहुत से दूसरे परिवर्तन आ रहे हैं।

मेरे पूर्व वक्ताओं द्वारा जो बातें कही गई हैं, उनमें काटने वाली कोई बात नहीं है। उसमें हम सबको जोड़ना ही है। लेकिन मैं समझता हूं कि यह महसूस करने का समय आ गया है कि चेतावनी हमें बहुत देर में मिली। जैसे मेनका जी कह रही थीं कि यह प्रक्रिया चालू हो चुकी है और बहुत समय नहीं मिलेगा। निश्चित रूप से हमारा जो नौजवानों का मुल्क है, उनके लिए क्रिटिकल एजैंडा है, सबसे महत्वपूर्ण एजैंडा है क्योंकि इससे हमारे नौजवानों की जिंदगी सबसे ज्यादा प्रभावित होने वाली है, नई पीढ़ी सबसे ज्यादा प्रभावित होने वाली है। प्रकृति का यह संतुलन बहुत नाजुक है और जैसा मैंने बताया कि मानव गतिविधियों के फलस्वरूप जो कार्बन डाइ ऑक्साइड हवा में भरी हुई है या रुक गई है या प्रकृति की प्रक्रिया के अंदर एबजॉर्ब नहीं हो रही है, उसने इस बात को साबित किया है कि जो ह्यूमन एक्टीविटिज हैं, उससे इसका सीधा लिंक है। प्रकृति का संतुलन बहुत नाजुक होता है। हालांकि पिछले करोड़ों वर्षों में प्रकृति में बहुत से परिवर्तन आए हैं, लेकिन आज हम जिस मोड़ पर खड़े हुए हैं, जितनी ज्यादा पूरी धरती की आबादी हो चुकी है, जिन विचार मूल्यों पर हम चल रहे हैं कि सबको सम्मान और इज्जत के साथ आगे रहना है, सस्टेन करना है और भाईचारे के साथ आगे बढ़ना है, उसके लिए बहुत ही गंभीर खतरा पैदा हो चुका है।हमारे पूर्व वक्ता इस बात को बता चुके हैं। आईपीसीसी की जो रिपोर्ट आई है, उसके माध्यम से हम इस बात को समझ चुके हैं कि एक-एक डिग्री जो ऐवरेज टैम्परेचर बढ़ रहा है, उसके साथ जो क्लाइमेटिक वैगरीज़ हैं, उसमें कम से कम 7 प्रतिशत का इजाफा हो रहा है। गवर्नमैंट रिवैन्यू को जो लॉसेस एस्टीमेट किए गए हैं, एक-एक डिग्री पर 13 प्रतिशत रिवैन्यू लॉ डायरैक्टली एसैस किए गए हैं। हम समझ सकते हैं कि हमारे जैसी दूसरी जो विकासशील अर्थव्यवस्थाएं हैं, उनके लिए कितनी बड़ी चेतावनी सामने आ चुकी है।...(व्यवधान) मैं ज्यादा लम्बी बात नहीं कहना चाहता। आप मुझे थोड़ा सा समय और दीजिए। हिन्दुस्तान किसानों का मुल्क है। जो क्लाइमेटिक चेंजेस आ रहे हैं, जो पर्यावरण बदल रहा है, उसका खेती पर कैसे नेगेटिव असर पड़ रहा है, मैं सिर्फ इस विाय पर आपके सामने दो शब्द कहना चाहता हूं। आज हिन्दुस्तान में जीडीपी की जो ग्रोथ हो रही है, निश्चित रूप से अगर उसे इंटरप्रेट किया जाए तो वही कार्बन एमिशन का मीटर होता है। कोई भी मुल्क जो किसी भी परसेंटेज के हिसाब से अर्थव्यवस्था में विकास कर रहा है, यह अंडरस्टुड है। इसे मान लेना चाहिए कि वहां उसी स्तर से कार्बन एमिशन बढ़ रहा है। हमारे यहां ट्रांसपोर्ट सैक्टर, इंडस्ट्रीज और दूसरी जो गतिविधियां हैं, उनके अलावा कृाि क्षेत्र में भी हमारी जो ट्रेडिशनल प्रैक्टिसेज हैं, खेती करने के जो परम्परागत तौर-तरीके हैं या खेती पर जो हमारी 70 प्रतिशत से ज्यादा आबादी पल रही है, उनका जो रहन-सहन का स्तर है, जीने के तौर-तरीके हैं, मुझे लगता है कि उसमें बहुत गहन चिंतन करने की जरूरत आ चुकी है। उनके रहन-सहन का स्तर बदले, इसके लिए ऑलटरनेटिव एनर्जी रिसोर्सेज, जैसे हमारे कई पूर्व वक्ता बहुत गंभीर स्वर में व्यक्त कर चुके हैं, उन्हें लान्च किया जाना बहुत जरूरी है। यह सच्चाई है कि हमारे यहां अभी एनर्जी कन्ज्मशन का जो लैवल है, वह शहरों में ज्यादा है, देहात में बहुत कम है। हमें अपने यहां गरीबी दूर करने के लिए, लाचारी दूर करने के लिए, इस मुल्क को आगे बढ़ाने के लिए, जैसे प्रधान मंत्री जी कई बार कहते हैं कि इन्क्लूसिव ग्रोथ रेट पाने के लिए, हमें पावर कन्ज्मशन रेट को बढ़ाना ही पड़ेगा। ...(व्यवधान)

सभापति महोदय : आपकी पार्टी के दो और माननीय सदस्य बोलने वाले हैं।

श्री रवि प्रकाश वर्मा :मैं जल्दी कनक्लूड कर दूंगा।...(व्यवधान) यह बहुत महत्वपूर्ण मुद्दा है।...(व्यवधान)

सभापति महोदय : आप बहुत अच्छा बोल रहे हैं परन्तु समय की सीमा है।

श्री रवि प्रकाश वर्मा : सब सहमत हैं, कोई भी किसी की बात नहीं काट रहा है।...(व्यवधान) मैं सिर्फ दो बातें ऐड करना चाहता हूं। मुझे आशा है कि इससे सब सहमत होंगे कि एग्रीकल्चर प्रैक्टिसेज में क्रान्तिकारी परिवर्तन लाने की जरूरत है। सबसे बड़ी बात

है कि जिस गंभीर विाय पर हम आज यहां चिन्ता कर रहे हैं, हिन्दुस्तान के करोड़ों काश्तकार उसके विाय में कोई वास्ता नहीं रखते। उन्हें पता ही नहीं है कि ऐसी भी कोई समस्या हमारे सामने है जिसका हमें समाधान निकालना है।[N21]

मुझे लगता है कि आने वाले समय में हार्टिकल्चर या फारेस्टेशन का बहुत बड़ा एजेंड़ा लेकर चलने की जरूरत है। मेरी कांस्टीट्एंसी मेनका गांधी जी के क्षेत्र के पड़ोस में है। वहां चिंता के ये स्वर व्यक्त किए जा रहे हैं कि हमारा जो चेन था, तराई के नीचे जंगल का एरिया, थ्रआउट नार्थ, नार्थ ईस्ट एंड नार्थ वेस्ट का लिंक टूट चुका है। हमने और हमारे साथियों ने खुद संकल्प लिया है कि कम से कम 50 लाख उपयोगी पेड़-पौधे हम फार्मिंग सैक्टर में लगायेंगे जिससे हम अच्छे प्रयोग कर सकें और सेस्टेनेबल एग्रीकल्चर के नये मानदंड ला सकें। मैं आशा करता हूं कि हमारे दूसरे साथी भी इस चीज पर गौर करेंगे और अपने-अपने रिस्पैक्टिव एरियाज में इस इश्यू को आम आदमी, स्टूडैंट्स, नयी पीढ़ी और काश्तकारों तक पहुंचाने में महत्वपूर्ण योगदान अदा करेंगे।

एक बड़ा इम्पोर्टैंट इश्यू जो क्लाइमेट चेंज से जुड़ा हुआ है, वह पानी का है। हमारे पूर्व प्रधानमंत्री कई बार कहा करते थे कि अगर धरती पर कभी तीसरा विश्व युद्ध होगा, तो वह पानी के लिए होगा। पानी की धार हम महसूस कर चुके हैं। आज भी हिन्दुस्तान के कई राज्यों में खाली पानी को लेकर टकराव चल रहा है। कई प्रांत ऐसे हैं जहां पानी का अभाव माहौल खराब पैदा कर रहा है, बड़ी अजीब स्थिति पैदा कर रहा है।

मुझे लगता है कि अब समय आ गया है जब एक पोलिटिकल विल, खाली हिन्दुस्तान लैवल पर नहीं, प्रांतों के लैवल पर नहीं, बल्कि ग्लोबल लैवल पर पैदा करने की जरूरत है जिससे हम इन समस्याओं का समाधान कर सकें। जो ह्यूमन डेवलपमैंट इंडीकेटर्स हैं, यानी मानव विकास के सूचकांक हैं, उसे पोजीटिव तौर पर और सस्टेनेबल डेवलपमैंट के माध्यम से आगे ले जा सकें।

मैं भारत सरकार के लिए दो-तीन बातें और कहना चाहता हूं। अब समय आ गया है कि जितना भी बायोटिक प्रैशर हमारी गतिविधियों से पड़ रहा है, उस बारे में क्लीयर फूलप्रूफ ऐसेसमैंट भारत सरकार सभी लोगों को उपलब्ध कराये, जिससे जो प्लानिंग मैकेनिज्म है, प्लानिंग एजेंसी लगी हुई हैं, वे इस बात को महसूस कर सकें। जो मिथेन एमीनेशन हो रहा है, कार्बन एमीनेशन हो रहा है, कम से कम हिन्दुस्तान के लैवल पर उसका क्लीयर ऐसेसमैंट हो कि उसके कौन-कौन से कारण हैं और वह किस गति से आगे बढ़ रहा है। इसका सर्वे और डाटा हिन्दुस्तान की आम जनता को उपलब्ध कराया जाना चाहिए। निश्चित रूप से ये चैलेंजेज हमारे सामने हैं। लेकिन लो कार्बन एमीनेशन इकोनामी को मॉडल शेप में करने के लिए मुझे लगता है कि बहुत बड़े पैमाने पर आपको टैलेंट और रिसर्च डेवलपमैंट की जरूरत है। मैं समझता हूं कि हमारा योजना आयोग और भारत सरकार मिलकर इस दिशा में पहल करेंगे।

दूसरा मुद्दा मुझे सबसे इम्पोर्टैंट लगता है। अब समय आ गया है कि पूरा समाज, चाहे ग्रामीण क्षेत्र में हो या शहरी क्षेत्र में हो, अब नॉलेज बेस्ड सोसायटीज बनेंगी क्योंकि जो इग्नोरेंस हे, अज्ञानता है, उस कारण इस संबंध में जो नुकसान हो रहा है, उसकी हम कोई समीक्षा भी नहीं कर पा रहे। मैं चाहता हूं कि इस मुद्दे को एजुकेशनल ऐकेडमिक करीकुलम का हिस्सा बना दिया जाये। निश्चित रूप से यह एक बहुत बड़ा आर्थिक मुद्दा है। पहले भी जब कभी सुनामी या दूसरी प्राकृतिक विपदाएं आयी हैं, उनसे बहुत बड़ी तादाद में अर्थव्यवस्था ध्वस्त हुई है। यह माना जा रहा है कि आने वाले समय में अगर बड़े तूफान आयेंगे, जल भराव होंगे या सूखा पड़ेगा, तो बड़े-बड़े मुल्कों की पूरी अर्थव्यवस्था ध्वस्त हो जायेगी। जो नेचुरल डिजास्टर्स हैं, उनके क्या इम्पैक्ट्स होंगे, इसकी जानकारी हिन्दुस्तान के हर आदमी को दी जानी बहुत जरूरी है।

जैसा हमारे पूर्ववक्ता चिंता व्यक्त कर चुके हैं कि पूरी धरती पर डेंजरस इंडीकेशन्स मिल रहे हैं। बहुत से पक्षियों, कीड़े-मकौड़ों और जानवरों की नस्लें इस धरती से खत्म हो रही हैं। इसके मायने क्या हैं?इसके मायने ये हैं कि धरती पर जो ओशियन करेंट्स हैं, जो विंड सिस्टम्स हैं, उन सबके अंदर परिवर्तन आने लगे हैं। मुझे लगता है कि इसका क्या इम्पैक्ट होना है, जो भी डिजास्टर सामने आने वाला है, वह किस रूप में सामने आने वाला है और किस समय तक वह शेप लेगा, इस बारे में बहुत बड़ी रूपरेखा बनाने और हिन्दुस्तान के अंतिम व्यक्ति तक इस चीज के लिए एक निश्चित पोलिटिकल एजेंड़ा, पर्सनल एजेंड़ा बनाये जाने की जरूरत है।

इन्हीं शब्दों के साथ मैं अपनी सहमति सभी वक्ताओं के साथ व्यक्त करते हुए आशा करता हूं कि यह सदन इस बात का संकल्प लेगा और सरकार उस संकल्प के माध्यम से मानवता की रक्षा करने के प्रयास को आगे बढ़ायेगी।

MR. CHAIRMAN : Now, Shri Kapil Sibal to speak.

SHRI KHARABELA SWAIN (BALASORE): Sir, I am very happy that the hon. Minister, Mr. Kapil Sibal is present here. It is because he is a very important part of this solution, I would request him not to intervene now. He should listen to others. Then only, he should intervene because he is a part of the solution. He is a very, very important part of the solution.

श्री रवि प्रकाश वर्मा :इनको तो रिज्योल्युशन लाना चाहिए।

SHRI KHARABELA SWAIN : So, he should not intervene now. I am very happy that he is present here. I will appeal to him not to intervene now. He should listen to us. Then only he should intervene. Now, it is up to him.

सभापति महोदय : यह तो आपके ऊपर निर्भर है कि आप किस तरह से सोचते हैं।

श्री रेवती रमन सिंह (इलाहाबाद) : महोदय, माननीय मंत्री जी बाद में बोलें और अगर जरूरत पड़े तो हाउसका समय बढ़ा दिया जाए।

सभापति महोदय : सिब्बल साहब बोलना चाहते हैं या नहीं बोलना चाहते हैं, यह उन पर निर्भर है।

श्री रेवती रमन सिंह : महोदय, सिब्बल साहब काबिल आदमी हैं, सबकी बात सुनकर बाद में बोलें।

THE MINISTER OF SCIENCE AND TECHNOLOGY AND MINISTER OF EARTH SCIENCES (SHRI KAPIL SIBAL): The reply is going to be given by the hon. Minister for Environment.

SHRI KHARABELA SWAIN : Sir, he should intervene but not now.

श्री शैलेन्द्र कुमार (चायल) : महोदय, सदन का समय बढ़ाया जाए जिससे कि जो माननीय सदस्य अपनी बात कहना चाहें, कह सकें।

श्री रेवती रमन सिंह : महोदय, सदन का समय बढ़ा दीजिए।

सभापति महोदय : समय बढ़ाने की बात नहीं है, सिब्बल साहब इन्टरवीन करना चाहते हैं।

श्री रेवती रमन सिंह : महोदय, सिब्बल साहब सबकी बात सुनकर बाद में बोलें। ...(व्यवधान)

SHRI SURESH PRABHAKAR PRABHU (RAJAPUR): It is because we like to listen to you. You please listen to us.

SHRI KHARABELA SWAIN : After your speech, there is no meaning of our speaking.

श्री रेवती रमन सिंह : महोदय, इसमें इतनी जल्दी क्या है? अगर जल्दी है तो इस चर्चा को यहीं वाइन्ड अप कर दीजिए। आखिर इतनी जल्दी क्या है?

श्री रवि प्रकाश वर्मा : मेरी रिक्वेस्ट है कि आप इस पर बाद में बोलें ताकि सदन इस पर अपना संकल्प प्रकट कर सके।

SHRI KAPIL SIBAL: The Minister will reply.

SHRI KHARABELA SWAIN: You are a part of the solution. You should respond but not now.

SHRI KAPIL SIBAL: I yield to the request of the hon. Members.

SHRI REWATI RAMAN SINGH : Thank you very much.

सभापति महोदय : मोहिदीन कादर जी, आप जिस भाषा में बोलना चाहते हैं, उसके लिए अनुवादक अभी उपलब्ध नहीं है, इसलिए आप थोड़ी देर बाद बोलिए।

श्री सुरेश प्रभाकर प्रभु, कृपया आप बोलिए।

श्री कपिल सिब्बल: मैं कहना चाहता हूँ कि जब मेरी बारी आए, तब तक माननीय सदस्य बोलकर चले जाएंगे और केवल आप और मैं यहां बैठे रह जाएंगे। ...(व्यवधान) ऐसा पहले भी मेरा अनुभव हुआ है, हो सकता है कि मैं गलत हूँ।

श्री खारबेल स्वाईं :नहीं-नहीं, ऐसा नहीं होगा। हम लोग बैठकर आपकी बात सुनेंगे।

सभापति महोदय : समस्या की गंभीरता को देखते हुए आपके लिए ऐसा कहा गया है। अगर आपने यह तय किया है कि आप उ पस्थित रहेंगे तो यह बहुत अच्छी बात है।

SHRI SURESH PRABHAKAR PRABHU (RAJAPUR): Sir, first of all I think we are discussing something today which is going to affect not just us but humanity in totality. All the six billion people living on the planet are under severe threat of survival. But more than that, probably, the entire biological life that exists on this planet is also under severe threat. So, this is a very serious matter that we are discussing today, and that is why I am very glad that across the Parties, across the House, both the sides, we are discussing this matter. That is why, we are requesting Mr. Kapil Sibal, who is one of our enlightened Members, to share his ideas also a little later because we are all really concerned about this.

Sir, we have faced changes in climate all throughout the existence of this planet itself. It is not that the climate does not change at all. There was an ice age which just disappeared. There were dinosaurs which no longer exist on the planet. So, it is not that the climate does not change. So, why are we so concerned? It keeps changing all the time and it is now changing. So, what is the cause of concern? Cause of concern is not a change of climate itself but change of climate caused by human action. We always thought that this change is not natural one but the crisis is human made, and that is what we are really concerned. We, the world community, signed the UNFCC, United Nations Framework Convention on Climate Change. But the Convention was not enough. So, a little later we signed the Kyoto Protocol, the Protocol which can actually implement the ideals, the principles of the Convention[MSOffice22].

Today we have a Protocol, we have a Convention and we have a problem. We realized that just by signing the Convention and Protocol it will not help. We signed the Protocol and then we thought that emissions will start falling. In fact, since 1990, we have seen that we wanted to bring down the emissions in the developed countries over the 1990 level by 2012. But in 2007 we can say that the emissions have gone up from the levels that they were in 1990 and they were not even falling. So, that is a real reason of crisis. Therefore, when we signed the Protocol, we were not aware about the scientific evidence conclusively. But over a period of time, the Inter-governmental Panel on Climate Change, which was set up by UNEP and the World Meteorological Organization have now conclusively proved that climate change is human-induced.

But there is something that is very interesting which is coming out of this Report is that this climate change is not only human-made but it is caused by actions from 1750. What is the significance of 1750? That is the year when we had industrial revolution which actually started in the world. So, it is something which is caused by the actions of those who started industrial revolution in the world. We in India are the victims of climate change. We are sufferers of climate change. We are not the cause of climate change. That is the difference between the whole world suffering but we are suffering not because of us but because it is by somebody else's actions that we are suffering today.

Therefore, what is going to happen as a result of climate change? Many of my distinguished colleagues have already put it across and I do not want to repeat it. But there are going to be fewer cold days and there are going to be higher temperatures and there is going to be more heat and more hurricanes and more droughts as a result of which we are going to have more sufferers in poorer countries and poor in the rich countries. Sir, this is the travesty of justice in which the rich countries cause pollution and the sufferers are the poor countries. This is something which I do not know how it has happened. But this is the reality which is proved that the poor are going to be the more sufferers of climate change and this is something which is going to happen.

In the whole world, including India, we are right now preoccupied with one singular object of increasing our GDP. Whatever we do, we want to find out whether our GDP will increase or decrease. If it is going to increase, you work on it. The world community, the World Bank, the IMF and everybody talks about increasing the GDP growth of the world. The climate change is going to decrease the GDP from two percentage points to probably four percentage points. It is anybody's guess. Anybody can make any estimate because this has really no basis. But it is for sure that the GDP loss is a certainty. So, we should be concerned that when we talk about the economic activity which is causing climate change, the same economic activity is actually going to decrease our GDP gains and, in fact, they are going to decrease it. So, poverty in poor countries is going to increase and the poorer in the rich countries are going to suffer more and this is something which is really a matter of great concern to us.

Sir, we have made a very interesting agreement in Kyoto Protocol. We have divided the countries into Annex-1 countries, the countries who are industrialized countries, who are supposed to reduce emission and others. The Kyoto protocol talked about the non-Annex-1 countries, the countries who are not required to reduce emissions. Now we have seen that the whole world is

saying that all the world should take the responsibility. Yes, it is a fact. Everybody has to take responsibility because even in Kyoto Protocol there is a clause which is the foundation of the Kyoto Protocol which is common but differentiated responsibilities. So, we agree that the whole world has to take responsibilities but differentiated ones because the world is different. There is already a gap between the world that exists today, between the poor countries and the rich countries. So, it should not be perpetuated further. There should be an agreement to do that.

Sir Nicholas Stern, a very eminent economist and the Adviser to the Prime Minister-to-be of UK, Mr. Gordon Brown commissioned a study. Everybody wants to look 'green' now. If you want to be the Prime Minister you should look 'green' so that you will get a better acceptance by the people. So, he commissioned a study and the study revealed very interesting things. If you take an action today, the cost of taking that action will be much lower than if you do not take any action and the cost of inaction will be much higher. Therefore, the action is called for now and that is why we are debating at a time and I am very happy that we are going to work on it. [MSOffice23]

Sir, I was talking about how we are going to be affected by this. Our entire activity – commercial activity, economic activity and agriculture activity – will be affected. Two-thirds of the world population largely depend on agriculture in developing countries. So, the mainstay of the developing countries is agriculture. Though, for example, in India, agriculture accounts for less than 20 per cent of GDP, still more than 60 per cent people in India depend on agriculture. Agriculture is going to be badly affected. The crops of wheat and rice cannot withstand heat. In fact, there is a very interesting study made by Leister Brown, who was Advisor to USA Secretary Freeman, who actually brought the Green Revolution to India, that if the temperature rises, the wheat crop will take a beating. Therefore, we will have serious problem regarding wheat and rice crops.

More than that, the water availability is going to be under severe strain. We are already facing water shortage. In the context of India, the term 'climate change' is a misnomer. In the case of India, it is going to be 'climate variability'. It is not climate change that is going to affect us; it is the climate variability which is going to be a serious problem for us because climate variability would mean that there would be too much rain for some time and probably no rain for a long time. So, variability in climate is going to cause a serious problem with regard to water availability. It will result in problem with regard to agriculture, water and public health. It is definitely estimated that water scarcity will also lead to salinity in water resulting in many diseases, including dengue, cholera and malaria. The mortality rate will also rise because of these diseases as well as the increase in heat. As a result of this, we will see lesser caloric intake by the poor people because the food production would have fallen and it would further aggravate poverty that we have today. Therefore, it is a very serious problem.

16.42 hrs. (Mr. Speaker *in the Chair*)

Everybody has said that glaciers will melt. In fact, glacier melting is the result of temperature rising. As a result of that, sea level will rise. All these things are related to one thing. So, what would

be the response of India? I think, the response of India should be looked at from two angles. First, how should we respond to it, as this is a global issue, in the global context? What should be the response of India to it internationally? Second, what should be the India's response in terms of changing domestic policies?

First, I will talk about international response because it is a global problem. It is like a human body. I cannot say that my hand is not working well, but my body is fine. In the same way, the entire eco-system of the whole world is inter-related and inter-connected. If the US is affected, India is affected; and if India is affected; Africa is affected. In this way, everybody is affected by it because there is one eco-system. So, India's response has to be international also. For a long time, we have accepted the principle and we are talking about it. India has been saying that our *per capita* emissions are one of the lowest in the world. We have got the largest number of poor living in India. So, we cannot say that we can take a cap on emissions because it will be really dangerous for India. We should say that we understand that we have to change our policies, but we must also say that those who are emitting more should try to reduce their *per capita* emissions and we, in India, will also try to increase our emissions and wherever it converges, we can accept that as a point on which there can be capping. So, capping has to take place in a manner which will be very fair, equitous and just for a developing country like India.

The world is talking about poverty reduction at international level. The heads of all the States met about seven years ago and signed a document called *Millennium Development Goals*. Just as the UNFCC is in place which is signed by all the countries of the world, in the same way, *Millennium Development Goals* is signed by all the countries of the world. So, we must marry the environmental concerns with our social concerns and try to make sure that poverty reduction is not affected because of our concerns for environment.

Sir, we have accepted the principle 'polluter to pay' internationally. If 'polluter to pay' is the principle accepted and if the Fourth Assessment Report of IPCC conclusively proves that it is the Industrial Revolution which has caused it, then those who started Industrial Revolution must pay for it. Therefore, 'polluter to pay' principle has to be accepted and the industrialised nations, who cause the pollution and damage the eco-system, must pay for it. To do that, we must also take the initiative. I will talk about international one first. Shri Kapil Sibal is aware that the World Bank was mandated by the G-8 countries to come out with an investment framework for energy sector. This is a framework document which is going to come as energy sector is going to receive more than US $ 3 trillion of investment in a decade and a half. How that investment is made is important. India must play a very pro-active role in shaping the policies of this investment framework which the World Bank is preparing because this will become like a regime in which the investment framework in energy will take place. So, we must really work on it.[s24]

I would, now, like to mention the most important point with regard to this issue. We must fight for adaptation. Actually, the climate change has two components. We all talked about mitigating the emissions, but most important is the adaptation to climate change. The IPCC Report also talks about it, that is, if we stop emission today, then the atmosphere is going to remain the same for the next 100 years as it is already affected today. Therefore, if it is to remain a reality, then we

must adapt to it. Adaptation measures are most important part of India's priority. Therefore, I will request the Minister to pursue the policy of Adaptation Fund. If pollutants are to pay, then they must fund the Adaptation Fund and India must benefit from the Adaptation Fund. Adaptation has to be one of the important priorities, and the cornerstone of it.

We have all talked about technology, and I will also talk about it a little more. Technologies should not just be confined to energy and other sectors, but technologies must also be devised and designed to deal with adaptation measures required for it. The adaptation is required in the field of agriculture, habitation, water-related issues, etc. So, adaptation technology needs to be developed, and that is what should be done.

In addition to this -- when I talked about what we really need to do internationally and domestically -- I think that our energy policy must also undergo a sea change. Coal is going to remain the mainstay. The Expert Committee on Integrated Energy Policy consisting of group of experts and Chaired by Dr. Kirit S. Parikh said that coal will remain the mainstay of India's energy sector till 2050. If coal is going to be there and energy security is important, then we must develop technologies like carbon-storage and capture. Can we capture it and store it below the surface, so that there is no emission? Something like this needs to be developed. In any case, our energy policy, our transport policy, and our industrial policy must undergo a sea change.

I would like to offer some suggestions. Firstly, we need new technologies. We need the technologies, which are going to save not only India, but the whole world. If the developed countries give us technologies, then it is not a favour that they are doing to us because they are doing it in their own interest. I am saying this because if we keep emitting greenhouse gases, then they are also the sufferers just like us. We do not want to rock the boat on our own, but we want technologies, and we must develop technologies through a joint project for it. We have Shri Kapil Sibal sitting here who was part of a project for developing a vaccine for HIV AIDS. Can we not develop a model like this wherein new technologies developed will not be covered by intellectual property rights, so that these technologies can be disseminated across the world? This would allow the poor to use it, the rich can use it, they will benefit from it and we can also get benefited from it. Hence, it would be an intellectual property right free regime.

We must have a new technology development initiative. We must not treat the adaptation as a step-child. In fact, Shri Raja must work on it, and not treat adaptation as a step-child. It is not that you are treating it like this, but the whole world is treating it like this. Mitigation is important, and adaptation is even more important. Therefore, we should try to work on it.

There is a very interesting model available in the world. The Montreal Protocol was signed to reduce the Ozone Depleting Substances (ODS). ODS were actually causing a hole in the ozone system. We worked on it as a world community, and now we are seeing that the ODS is declining. We have a very good protocol there. Therefore, some such model should be developed like the Montreal Protocol for reducing the greenhouse gases. This will really help us. Further, we must have a country-specific study. The other day I was requesting Shri Kapil Sibal to have only India-specific study of the impact of climate change and on all its aspects. This will really result in assessing the actual damage. I am saying this because if we are going to talk about damage and we are going to

recover cost from them, then we should know the extent of damage. Then only we can get an insurance cover and the insurance claim satisfied at the time of actually lodging the claim. We must have a study done in a very integrated manner.

We must fight for creating an international body of all environmental concerns because there are too many bodies in the UN system that are dealing with the environmental issues. In fact, if proliferation is an issue, then it is not nuclear proliferation but it is proliferation of UN bodies. We must bring them under a common umbrella, and they can then fight the climate change in a very integrated manner. A bipartisan attitude is required for it. I am very happy that you decided to allow a discussion on this issue. I would request you that we must have a bipartisan group in which we all can work together on the climate change issue because this is not an issue that can be decided on partisan lines.[r25]

We are all going to be affected; we are all going to suffer, and we are suffering already. Therefore, this should be done in that particular manner. Most importantly, Kyoto Protocol will come to an end in 2012. What we would do after 2012 is a very important issue. For that, we really need to have a broader discussion within the country as well as with some of our very important allies, like in the G-5 and G-20 countries, and we must work with them.

Market-based flexible mechanism: One is the Clean Development Mechanism, and the other is Joint Implementation. India is one of the beneficiaries of CDM projects, but CDM is not functioning as it should be. This is a very good umbrella.

MR. SPEAKER: What is CDM?

SHRI SURESH PRABHAKAR PRABHU : It stands for 'Clean Development Mechanism', Sir. There are three flexible mechanisms in Kyoto Protocol. One is emission trading which is between developed countries only; the second is Joint Implementation, and the third is the Clean Development Mechanism with which developed and developing countries can receive FDI, technologies and we can build our infrastructure also in terms of making it more climate changing proof. For that Clean Development Mechanism, we need a different type of approach. I think that also needs to be done in a very big way.

My last point, and thank you for allowing me so much of time, is that population of India is also to be considered as a part of the problem than as a part of an asset. We are all thinking that we are going to get demographic dividends – the more the number of people, the better it is. Population increase means that there is decrease in *per capita* availability of natural capital, particularly land and water as a result of which the footprints of the people on the Planet increase. We must control population; we must work on this in a holistic way. If we can all agree as a House, I am sure we can deal with this problem in a genuine manner.

MR. SPEAKER: I wish some of our other colleagues were present in this House to listen to all the speeches that have been delivered.

PROF. K.M. KADER MOHIDEEN (VELLORE) : Sir, in the name of almighty let me commence my speech. At the outset, I would like to thank the Hon. Speaker for allowing me to speak on this subject **'Global Warming'** which he has chosen to permit to be discussed in this august House.

All these years, this House has been discussing about globalization. For the first time now we seek to discuss about 'Global Warming'. It is for the first time that you have permitted us to discuss about the effects and impact of heat generating gases and substances that lead to 'Global Warming' that would affect our eco-system and weather pattern. Let me thank you again.

The reason for 'Global Warming' is one too many. There are many factors that lead to this disastrous effect on nature and our eco-system that ultimately affect life on this planet. My esteemed colleagues who spoke ahead of me have fathomed deep into the subject. They have also put-forth their valued suggestions.

'The world will move to its end', is what our Holy Scriptures say. Man alone will be leading to his own destruction and the end of this universe. This is what we learn from Vedas and from other Religious Scriptures. Hindu Religion talks about Kaliyuga. There are many references to it. Bible and Quran also talk about the great deluge and the judgement day and the final days of the world. In the great didacatic book which forms part of Tamil literature 'Thirukkural', we find many references to man leading to his own destruction and of this earth. The wrong handling of things in the hands of man result in making his actions evil and make him an evil force prevailing over the nature.Our scriptures talk about

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*English translation of the speech originally delivered in Tamil.

the deluges from the sea, inundating floods, planetary disalignments resulting in one hitting against the other, mountains spreading in the air like cotton pieces, earth becoming topsy-turvy. "Where can man run? Man cannot run away from the evil effects which he had caused" is what our religions have to ask of man. During the last days of the world man cannot escape the result and effects of his action. Can he? In this Indian subcontinent, throughout the length and breadth of this vast land mass, many people would be quite familiar with this probing question as to where man can go without facing the consequences of what he is doing. India has got a great philosophical tradition with such searching questions. It is worth mentioning that a great initiative has been taken by our

honourable Speaker. Through this discussion based on our traditional wisdom we may be able to show to the world a right path. Our country is known for great philosophers and spiritual leaders. When the Nations of the world have scientists from various disciplines, we have matching number of path finders and seekers who have dedicated themselves to help people coping up with the challenges of the world through spiritualism. We can rightly call them spiritual scientists who have given us the wealth of ethical values and social values. If we look back and go back to their teachings we can rightly perceive they thought about this in the ancient times well ahead of modern world scientists. Our country had been treading on the right path only because of invaluable contributions by our Ancient Spiritual scholars. Those Spiritualists whom we can recognize as true scientists have given enough of fore-warning about the evil effects of men becoming greedy and beginning to exploit the world without a thought for others. They have been insisting upon the need to have consideration for others there by compassion. We have to uphold these teachings and pearls of wisdom and to live in unison with nature and its resources. We have come to a time when we need to be effectively reminded of our spiritual scholar's varied paths much treaded but never dreaded. We also have our spiritual wealth which help us to live in harmony with nature and fellow human beings. When evil and its evil effects spread and heat up the world, it results in the culmination of several natural disasters including that of catastrophic Global Warming. The seaers have fore-warned about the swelling of seas, fury of floods, denudation of greenery of the forests and green covers. Today we are worried about the melting of glaciers from the snow clad Himalayan ranges causing heavy floods and destruction through inundation and erosion.

When we go back to the past we learn that the instilled fears in men enable them to remain protectors of nature. Sayings and teachings of our spiritual men effectively impressed upon our people to live in harmony with nature can help humanity so that they are not gobbled up by nature. The Ancient people could save themselves from the fury of nature as they were shaped up by the teachings of our spiritual leaders. The instilled fears towards the conservation of nature helped them to face the fury of nature with an indomitable spirit. They were able to face the wrath of nature boldly. They were courageous enough to face the challenges in life with their strong foundation in spiritualism. Our Ancesters have already shown their path. It is relevant even today.

Today, we find a daily writing about a possible Tsunami like deluge in 2020 that may wipe out a vast land mass in the eastern coast as a result of which sea may creep in at least upto Thanjavur from where our esteemed colleague Hon. Palani Manickam has been voted to be a representative in this House. Recently in 'India Today' magazine, we saw a warning which mentioned that 'Gateway of India' would fall to the Sea after some years. This kind of sensationalism should not eat into the vitals of our faith and confidence. We have to come clear of these fear psychosis and phobia created by sensationalists. We have to derive strength from our rich cultural tradition that helped us to live in harmony with nature. The need of the hour is to spread this right kind of spirit in this country. We have to come out of doubts and confusion. We must evolve right methods and strategy to come out of the worry pertaining to the fall out of disasters and castastrophic global warming. Rather than going into the factors leading to global warming we must go into the solutions that may help us to resolve the problems posed by the heating up of our planet's surface and environment.

The need of the hour is to put our heads and hearts together to evolve ways and means to overcome the evil effects of global warming. I for one who would feel that a right mix of value education as derived from our religious and philosophical legacy must be imparted to our younger generations in our schools and colleges. The major reason for this global warming is the industralisation of the world. The developed western countries have caused the damage in a big way.

It is because of our aping the west and adopting the methods, techniques and technologies of the west we have led ourselves to the evil effects of spoiling our eco system and weather patterns. I would like to emphasise here that the developed countries have a responsibility to assist the developing countries like India so that they are helped to protect themselves from the fall out of global warming. We must make it imperative that they adequately compensate. I feel it is appropriate to demand a recourse from those who have led us to a polluted environment.

17.00 hrs.

At a time when we are faced with global warming mostly because of the westerners we must turn to the oriental treasures of wisdom and must be seeking comfort in union with nature. We must be cool when things are heating up so that we may bring down the warming up, there by bringing in solace. The great Iranian Scholar Hussain Nazeer spoke in U.N. as early as in 1962 about the imminent threat to our environment by different kinds of pollution. He was the first one to speak about the threat to our environment, ecology and eco system. “If you want peace on earth, you should establish peace with the Heaven”. We must learn to live in peace seeking peace from within and also through compassion in our fellowship with others.

India has a potential to show the way to the world. We must enlist all our men of spiritualism and science to evolve viable solution to the problems that are staring at our face in the wake of global warming. With the strong desire that our men of eminence, scholars and scientists would help us unitedly to come to the rescue of the vast multitude of people in this subcontinent, I urge upon you all to pray with devotion while assuring that my prayer is all with you. With the fervent hope that we would be able to overcome the series of serious problems witnessed and predicted in the face of global warming, let me conclude my speech.

SHRI B. MAHTAB (CUTTACK): Thank you, Mr. Speaker, Sir. I doubly thank you for listing this important subject to be discussed in this House of People. This House normally takes up issues which are of political interest, local interest or economic interest but this is an issue which concerns not only mankind but also concerns the interest of the living creatures of this earth.

That is why, when we are discussing on a topic of Global Warming or climate change, at the outset, I may mention here that the science of climate change has accumulated over many decades to become compelling today. The politics has changed with a startling suddenness so that previously skeptical leaders in the developed world are scrambling to catch up with the firming conviction of their electorates that serious action is urgently needed.[R26]

The two recent reports about which, of course, Mr. Prabhu also mentioned, one is by Nicolas Stern in the United Kingdom and another report which is being discussed invariably in the media is of Inter-Governmental Panel on Climate Change, that is, IPCC chaired by India's Dr. Rajender Pachauri, are the major catalysts for the dramatic mood swing in the world public opinion. Global climate change poses significant risks to the planet. All nations today have an important stake in addressing this new threat that is already sufficient to make collective action both necessary and urgent. Based on scale, magnitude and irreversibility, global warming constitutes a critical security issue. There is need, therefore, for action by all and a need for action now. Delay in acting on global warming will mean that the cost of addressing it later will be significantly greater. The technical challenges will also mount with growing complexities. Dealing with global warming is difficult because its dimensions are cross-sectoral. This puzzle is a global common problem but Government representatives act in their own national interests. We could find from the views that were expressed by Mr. Prabhu who was in the thick of things when the Kyoto Protocol was being discussed.

Here I am reminded of President Eisenhower who had once said that to solve a problem which is difficult, make it even bigger and magnify it which will bring attention and it will also bring resources. Therefore, broader crisis today is that of energy security. Therefore, along with steps to combat climate change or global warming action is also needed now on energy efficiency, conservation and diversification of new technological innovations which are urgently needed. I think the private sector also has a greater role to play in developing research and development. As the world's top climate scientists say, global warming is man made and the UN Inter-Governmental Panel on Climate Change which groups more than 2500 scientists from more than 130 countries predict more droughts, heat waves, rain, floods and slow gain in sea levels that could last for more than 1000 years. It is a cause of concern because this report puts the probability of the link between human activity and global warming at more than 90 per cent against 66 to 90 per cent likelihood it had signaled in 2001 when the Kyoto Protocol was being discussed. Therefore, the urgency is much more today. I quote:

> "Clearly, we are endangering all species on the Earth. We are endangering the future of the human race."

This is a quote of IPCC Chairman, Dr. Rajender Pachauri. It is said that man made emissions of green house gases can also be blamed for fewer cold days, hotter nights, killer heat waves, floods, heavy rains, devastating droughts and increase in cyclones and hurricanes. It is reported that temperatures are likely to rise by 1.1 to 6.4 degrees Celsius by the year 2100. With a probable 2 to 4.5 per cent range, if carbon dioxide doubles from pre-industrial levels. The Kyoto Protocol is the main plan for capping green house gas emission until 2012.[R27]

It is hardly another five years away. But it has been severely weakened since the US, top sources of Greenhouse Gas pulled out in 2002. This had prompted the then French President Jacque Chirac to comment, `we are, in truth on the historical doorstep of the irreversible'. The question before the world is, is it irreversible? One would ask, where do we fair ourselves? At present India contributes about three per cent of the global Greenhouse gases against a global average of 5.2 per cent. The US accounts for 30 per cent of the global emission. Yet I would reiterate that the US Climate panel has issued the starkest warning about the impact of global warming. The findings states that 25 to 30 per cent space face extinction if temperature rise of 2 degree Celsius above average in the 80s and 90s. Heat waves, flood, cyclones, drought will cause more death and harm. I would come a little later, in details, on the glacial retreat in the Himalayas. It will affect billions of people and millions in the coastal areas will be at risk from the sea level rise, especially in Asia. Production of wheat, paddy and maize in India and China will drop. Over a billion people may face shortage of fresh water by 2050. Around 75 to 250 million people in Africa alone will be exposed to water scarcity by 2020. The alarming situation is so near, yet in the thought process it is so far.

The burning of fossil fuel will cause desertification, drought and rising seas and would hit the tropics of Sub-Saharan Africa to the Pacific islands. It is the poorest of the poor who will be hit and this includes the poor people in the prosperous countries also. That is why it becomes a global responsibility. Global warming could re-make world's climatic zones by 2100 with some polar mountain climates disappearing altogether and formally unknown zones emerging in the tropics. When climatic zones vanish, the animals and plants that live in them will be at a greater risk of extinction. Previous studies have raised concern about space extinction in specific areas such in the cloud forests of Costa Rica and the Cape region of South Africa. But this is the first to predict a global change.

As Earth warms, predicted to happen by up to 8 degree Celsius at some latitude by the end of this century, climatic zones are likely to shift away from the Equator and towards the Poles and that will also affect the Himalayan glaciers. As earlier zones disappear, new zones will be created in the parts of the world that are already the hottest. India is amongst the top five sources of Greenhouse gases. Here, the United States has 7067.6 MTs according to the statistics of 2004; China in 2000 had 4938 MTs; Russia had 2024 MTs; India in 2000 had 1884 MTs and Japan has 1355.2 MTs. I need not go into the tonnes per capita because that actually does not explain the gravity of the situation. [R28] Therefore, we have a responsibility to accomplish. Let us not forget that Himalayan glaciers feed the seven great rivers of Asia, namely, Ganga, Sindhu, Brahmaputra, Salveen, Mekong, Yangtze and Huango Ho. These are the seven great rivers which flow from the Himalayan glaciers. All these rivers are under threat. The 33,000 square kilometers of glaciers amidst some of the world's highest mountains form the largest concentration of glaciers outside the polar ice caps. These glaciers

release an estimated 8.6 million cubic metres of water annually. Ancient civilizations sprang up and thrived along the shores of these seven rivers of these two great nations, China and India. Since the mid-1970s, global warming has been marked and the glaciers are receding. This will definitely have an impact, if left unattended. This could cause hunger for millions with sharp fall in crop yields. It could also bring heat waves for Europe and North America.

A study says and I think the Government is aware of it that 120 million people in Asia will experience increased water stress by 2020 and 185 to 981 million by 2050. I need not go into the details on this point.

India is the fifth largest emitter of carbon dioxide but lacks a credible policy to address human induced global warming. I would like to understand the concrete steps the Government is taking to address this issue. India is neither offering self-restraint nor claiming a carbon debt by asking for reductions in other countries' emissions. Today, India appears to be in denial over global aspects of human induced global warming. Today, there is a need for greater cooperation among meteorologists and scientists from China and India. We would like to know from the Minister as to what steps India and China are taking together to protect glaciers of the Himalayan region.

The second aspect about which I would like to mention very briefly is this. At the root of global warming is the overwhelming dominance of carbon-based fuels. These fossils fuel power economics including our own transport people and light up homes. They have also contributed since the industrial revolution to a marked rise in the atmospheric concentration of carbon dioxide. This could be the reason for 11 of the last dozen years being the warmest on record since 1950.

What alternative do we have? Scientists bring out solutions according to the need of the market. I would like to understand whether those developed countries which were so reluctant to recognize this problem have come out with certain technologies which would be adopted by developing countries A market is being created or is there something else on this? What alternative do we have? The challenge today is, while developed countries are largely responsible for the problem, India and China together should have a workable solution. Nobody should get a free ride on the sins of the West.

The Kyoto Protocol and the UNFCC are potentially workable international governance instruments. If they have been ineffective so far, it is largely because of the developed countries not joining in or keeping up their commitment. But we cannot satisfy ourselves because they are giving[MSOffice29] us a free ride.

There is a need to restructure energy use and increase energy intensity. But this will not solve the problem unless verifiable carbon reduction targets are fixed. We would like to understand from the Minister of Environment and Forests as to what steps the Government is taking in this regard. Have the Government fixed targets for verifiable carbon reduction? I would like to ask the Government as to what steps it is taking to fix verifiable carbon reduction targets.

As precaution to protect the coast, mangrove forests be encouraged; construction of sea wall has to be contemplated where the coast is shallow, where there is a possibility of sea water rushing

into the land.

I conclude by saying that warning of a catastrophe has never been so stark and chilling. The Report has been described as mankind's final warning and the alarm bell has never been so resonant.

Warm words of concern by the Government will not be enough to assuage the scenario. The Government, the scientists and the people together have to heed to the warning and work collectively to combat global warming. If humans are responsible for global warming and a possible catastrophe, then the responsibility for preventing it must only very logically rests with the humans.

We should bear in mind that mankind belongs to Earth and not vice-versa.

MR. SPEAKER: Shri Mahtab, I have given you five times more than the time you are entitled to.

SHRI B. MAHTAB: Thank you.

SHRI KHARABELA SWAIN (BALASORE): Mr. Speaker, Sir, can I speak from this seat?

MR. SPEAKER: Yes, you can. But it should not become a precedent.

SHRI KHARABELA SWAIN : Sir, global warming is not a scientific fiction now. It is a looming reality.

Most of the Members who spoke before me said that there is no dispute about the topic. But I have got a dispute. India wants countries like the United States of America, which are the worst pollutants to cut back their emissions fast. Shri Sandeep Dixit's and Shri Suresh Prabhu's, for whom I have the greatest regard, logic was that India's per capita emission is 25 times less than that of the average American and 15 times less than that of the average citizen of the European Union.

I agree with them that India is not certainly responsible for the mess. In fact, we are the victims of it. So, they asked, why we should tighten our belts. We are talking about growth. Shri Dixit asked why we should not follow the path of growth that has been enunciated and followed by the Americans.

If we try to replicate the life style of the so-called growth pattern of the West, shall we survive the day to reach their levels of comfort? Just because somebody got rich by utilizing certain methods which brought misery to billions, should we also follow it? In this issue, India should be the leader and not the follower. If India takes the lead in preserving the earth, it will automatically become a super power and it will automatically become a darling of the Nations. So my point is from the beginning, let me tell you that it is not the question of what others are doing, but the question is what we should do. We should not say that our per capita polluting power is less, maybe individually we are less, but we are more than one billion people. What is the population of United States of America? So if you go for the overall polluting effect we are making, it is not less than

America or something like this. … (*Interruptions*) It is all right. It is still much less, but should we follow their pattern? That is my basic point.

Sir I will not go on just repeating the points that what will happen to or what woe will befall on us as has already been enunciated by many of the hon. Members. I will just make two or three points with regard to what is going to happen. Now the global temperature is going to increase by four degree by the end of the Century and we want that it should be contained at two degree over this industrial revolution period. So India's job is to combat the global warming. But there are many of these countries who are making very strange arguments. What are their arguments? Combating global warming is too costly. There are many countries which say that it will stifle the development in the poor countries. Even they say that the temperature rise has gone too far for human kind to do anything about now. They throw up their hands. Actually, it has gone much beyond what the human kind can do. But the present Inter-governmental Committee of the United Nations has said that the world has got the money as well as technology to do it. It is still not too late. We can bring it. It is possible. I will confine my speech to making some suggestions only as to what we should do.

Firstly, Mr Minister of Science and Technology about whom I am very happy that he is present here because he is one of the most important parts of the solution, not the problem. So I will make a request to him. Can we replace the incandescent bulbs with fluorescent lamps? … (*Interruptions*)

MR. SPEAKER: I am sorry. I could not follow.

SHRI KHARABELA SWAIN : I am talking about the yellow bulbs. Should we stop its production because these fluorescent lamps consume one quarter of the electricity of that yellow bulb and they last longer?

Secondly, can we keep a tab on the production of the vehicles? I am talking about four wheelers, two wheelers etc. We think that it is the sign of comfort. Nowadays they have become the sign of doom. They are going to bring doom/dismay to our children and to this earth. One of the hon. Members, probably Shri C. K. Chandrappan, was saying that every husband will have one car, wife will have one car and children will have three or four cars. Any family who is having more number of cars is more respectable. Why can we not stop production of these cars? I will appeal to the Government that they should consider this proposal of mine that in the name of growth, there should not be unbridled production of cars.[a30] Let us start with Members of Parliament and with everybody.

The third one is about the non-conventional energy. Let us go for the solar device. Let us go for the wind energy. Let us go for the bio-fuel. I would appeal to the UPA Government to put more money on research and development for the enhancement of the use of non-conventional energy. It has been recommended by the IPCC, the UN Panel for Climatic Change, that transfer of coal-based to gas–based technology should be improved. I will make this appeal to the hon. Minister. Can we go for the construction of green buildings? It does not mean that the colour will be green. Green

buildings mean to build such houses or office complexes that will optimize use of energy. I will give one example. We should avoid huge glass-walls so as not to spend more on air-conditioning during the summer period. So, let us build green buildings. Let the Government come forward with such schemes so that we can build houses and complexes that will optimize the use of energy. By this way, less electricity will be consumed. We should make rules for the production of energy-efficient appliances, ovens, refrigerators, air-conditioners, etc. When they produce such appliances, they must bring in new technology so that it should be more energy-efficient. That will also cut the electricity bill. Further, more fuel-efficient cars should be manufactured. For every litre of petrol consumed by a car, about 4 kgs. of carbon-dioxide get injected into the atmosphere.

MR. SPEAKER: What about diesel?

SHRI KHARABELA SWAIN : It is still more.

MR. SPEAKER: Is it still worse?

SHRI KHARABELA SWAIN : So, we should put more money on research and development so that more fuel-efficient cars are produced. I have already told you about switching over to wind power. Any one individual cannot produce wind energy. When we are setting up the SEZs, can we ask the promoters of the SEZs to go for the wind power instead of going in for electricity?

MR. SPEAKER: Will solar energy do it?

SHRI KHARABELA SWAIN : Yes, Sir, solar energy will do that.

About re-cyling, I would say that India is a master in recycling. We are already having it. But I will give you one example. Suppose this paper is printed on one side. We just throw it away and tear it off. Can we utilize the other side?

MR. SPEAKER: I do it in my office.

SHRI KHARABELA SWAIN : Thank you, Sir. Can we utilize it? This is one of the things that we can do. But we simply throw it away. We simply tear it off. Can we not utilize it? This is about recycling because it will save a lot of trees. If we do that, it will save a lot of trees. I would make this appeal to the hon. Minister. Can we stop producing plastic bags? Several times, we have told that the production of plastic bags is hampering the health of this world. It is clogging the sewerage system. But I will tell you another thing. If we stop production of this, it will help reduce emission from plastic bags into the landfills. So, let us stop it totally. There should not be any production of plastic bags.

Improvement of public transport is essential.

MR. SPEAKER: We should use jute bags instead.

SHRI KHARABELA SWAIN : Yes, Sir. As I was telling, improvement of public transport is a must. I would appeal to the Government to do it because now the Government is flush with money.

Every year, the revenue collection is going up by 20 to 30 per cent. Let us go in for the metro railway system more and more. I have seen in many parts of the West that they have gone for the metro rail system which is very fuel efficient and also environment friendly.

Now, I will make a very unpopular suggestion. The price of electricity and water should be rationalized. Most of the time, we go for free electricity and free water. When our party was in power and I was sitting on the other side, about 7 or 8 years ago, one day I made a suggestion that when a farmer is getting electricity and water he should pay for it and immediately Mr. S. Muthaiah said that this is one of the most unworkable propositions given by me. It is not that I have only given that suggestion. In those days, many other people also had given this suggestion and now everybody knows that that was the right suggestion given. The use of water should be controlled. It should not be unrestricted. In the same way, nothing should be given free and particularly, electricity should not be given free. I know it is a very unpopular suggestion, but even then I am making this suggestion.

Then, more and more trees should be planted. Everybody knows that because that is the best sinker of carbon dioxide and Members of Parliament should take the lead in planting more trees. A major part of the MPLAD fund should be utilized for planting more trees.

SHRI RAVI PRAKASH VERMA : I am doing it already.

SHRI KHARABELA SWAIN : Thank you.

Sir, Mr. Prabhu made a suggestion for demanding clean technology from the West. Why should the West not transfer clean technology to India at cheaper rate so that the emission level could be cut down appreciably and we will not have to pay a hefty price for research and development?

Then, we should keep a check on the emission level from all the thermal power plants. I come from a State where MoUs have been signed with about 14 to 15 promoters for establishment of thermal power plants. We have a thermal power plant at Talcher and during summer, the temperature goes up to 50 degree Celsius. It is only because there is a thermal power station. During summer, it is simply burning and people do not prefer to come out of their houses during day time. We want to stay in a comfort level where we should always be confined to air-conditioned room and we are not able to come out in the open. Is this the growth that we are talking about? I appeal to the Government that unless the promoters of thermal power plants develop zero emission technology, they should not be allowed to set up their plants.

Then, nanotechnology should be introduced which will send the emission of carbon dioxide to below the ground level so that it will not come out. Last, but not least many hon. Members have complained against America. I agree America and Australia are the biggest polluters in the world. What should we do about them? They are not the signatories of Kyoto Protocol. If they do not go for reduction in emission level, the Third World should refuse to buy their products. Can the Third World do it? They should refuse to buy their products as they refuse to buy our goods on the apprehension of health hazards and on environmental issues. The European Union has taken a lead with regard to environmental protection, but the United States of America and Australia have not

done so. But can we refuse to buy their goods and tell them that we are not going to buy your products if you do not stick to Kyoto Protocol and if you do not bring down the emission level because you are the greatest polluters of the world?

MR. SPEAKER: You did not mention rainwater harvesting.

SHRI KHARABELA SWAIN : You have done it, Sir.

MR. SPEAKER: That I have already done in the Speaker's House, of course, with Government's money.

SHRI K.S. RAO (ELURU): Sir, I am very happy that the entire House is discussing today an important issue.

MR. SPEAKER: I am very happy that the hon. Members are making very good contribution and that I wish to compliment them.

SHRI K.S. RAO : Sir, it is only with your support because the encouragement that you gave has made us to contribute to this issue. The other day also when this issue was discussed, this encouraged many of us to speak and make a thorough study also on the subject.

Sir, I take global warming from a different angle. How is it going to affect the poor in this country, the agricultural sector in the country, the rural people in the country? I was given to understand from the data available that two degrees' increase in temperature is going to affect 7.1 million people. I do not know whether it is right or wrong. The economic impact of this climate change on Mumbai alone will be Rs.2,28,700 crore. Obviously, you can imagine what would be its impact on the entire world.

SHRI RAVI PRAKASH VERMA : It will break-down all the economy.

SHRI K.S. RAO : Yes. It will have an impact on the rice yield and paddy yield to the extent of 42 per cent. It cannot be imagined and understood.

Sir, I take some of the instances. The Himalayan Glacier, I understand, is coming down by 30 metres every year. In the last couple of years, almost 300 metres of glacier has come down. That means the water is melting at a greater rate, which can lead to floods and which will affect millions of people in the country. When ice and snow are melting at a faster rate because of this increased temperature, after certain years, there will be no water at all. Today, there will be floods, tomorrow, there will be no water in the rivers. So, both ways, we are getting affected.

Sir, I will mention some of the reasons. Let me give them one by one. About 50 per cent affect of this, I understand, is only because of fuel combustion, that is, either power generation by coal or oil, the industrial emission and then transport emission. We have got solutions to all these things. The only thing is that we are not applying brains to it.

As far as energy is concerned, everyone one of us know that the potential of hydro energy in this country is 1,50,000 MW and the total generation of power today in this country is 1,30,000 MW. That means, we are not tapping the hydel energy, which also helps in reducing this global warming. You could have comfortably gone for this and avoided all these undesirable gases. Water is renewable. Every year, it can be there and today if we do not install this 1,50,000 MW, we are not going to get 3,00,000 MW next year. That means, we are not utilizing the potentiality that is available, without affecting the lives of the people of this country.

Similarly, transport is there. I understand that because of lack of fuel efficiency of the vehicles, we are getting lot of carbon dioxide coming out, and which is affecting our lives. In transportation, my friends have suggested rail. I suggest one more thing and that is linking of rivers by which we can transport most of our goods and there we will not face this emission. We do not need to spend Rs.2,28,000 crore on Mumbai only on this effect.[r31] We will get greenery. When water is available everywhere throughout the country by interlinking of rivers, trees will grow everywhere and they will absorb carbon dioxide. That is sure. Emission of gas will automatically be taken care of by that. But we do not undertake interlinking of rivers. It is such a good project which can solve many problems. It can avoid floods, droughts and it can bring drinking water to every village. It can take care of carbon dioxide. It can avoid transportation by road and thereby reduce emission of harmful gases. All these benefits can be achieved by the linking of rivers which we are not doing.

My other point pertains to building industry. My friend was telling about green building. I would like to add something more to it. It should be intelligent green building.

MR. SPEAKER: He is also very intelligent.

SHRI K.S. RAO : We laugh at it when we say '*vastu*'. What is *vastu*? Without putting electricity, without burning kerosene, without burning anything, we are utilizing the nature and seeing in which direction the wind will naturally come into the house and in which direction the light will come. Thereby, all these problems of emission of gases will not be there. As Shri Swain said, if we were to make research in a manner that we can avoid all these things, emission of gases, the energy-efficient instruments can be brought in. Today, there is coal. Every one of us will use a heater, no matter how much energy it consumes and how much gas it emits. In my own house, when I put a heater when there is a cold day, I feel very uncomfortable. Thought there is an increase in temperature but it creates some kind of uneasiness. Similarly, when the temperature is very high, we use air-conditioners. But, in case, the research were to be done in a manner to design the building construction material, we do not need to spend this energy at all.

MR. SPEAKER: Hollow bricks.

SHRI K.S. RAO : Yes. We do not require all these air-conditioners; we do not require heaters. We can save energy and we can prevent the emission of all these gases. We do not look into it. That is why on many occasions I have said that we are neglecting Research and Development (R&D) in this country. A lot of money has to be allocated for R&D. We do not mind purchasing a drug at Rs. 1000 when it could be made by Re. 1. All this is because of R&D work not being undertaken there.

But we will discuss that America is looting us; that their production cost for a drug is Re. 1 and they are charging us Rs. 1000 for it and exploiting us. What is the research that they have done? Why can we not do it? How did they do that? They did that with the help of our people only. Either NRIs or some brains from Asia have gone there and they have done research. They are utilizing our brains. Can we not do the same thing here? Mr. Minister, you get more allocation for your Ministry. We all support you. By doing Research and Development, more particularly in this context, we can avoid all this expenditure.

Similarly, I think, agriculture related areas are contributing 30 per cent to the emission of gases. That can also be avoided by doing enough research in that direction. Cow dung can be used as manure but we are not using it. If we encourage more livestock, all these gases will be reduced. We encourage fertilizer, we encourage pesticides and for that we make a lot of publicity and give advertisements. Instead, we are not encouraging organic fertilizers.

I come to the coastal areas wherefrom I am. I understand that with 2 degree increase in temperature, 5,76,400 hectares will be submerg[r32]ed. The level of increase will be about 0.5 metre. By 2100, the sea water will come into the main land and the salinity will increase, and a lot of areas will become useless. The sweet water will not be reaching the down areas, and thereby also we are losing very heavily.

Sir, during my childhood, my parents used to start plantation in the month of May. Now, season is changing, changing so rapidly, and it is unimaginable. Today, the plantation, which used to take place, about 40 years back, in the month of May is now being done in the month of August. By the time the crop comes, which is excellent and the farmer is very proud that he is getting 50 bags of paddy per acre but in overnight there will be cyclone and the entire crop gets damaged. So, the delay in plantation leads to the delay in the crop yield, and by that time cyclone comes and the entire crop gets damaged. That means, the change in climate, in several ways, is affecting the entire economy of the country and more particularly the poor people in the rural areas. The urbanites and the rich people may be able to come back.

Now, many of our friends have said that 20 per cent of the population in the developed areas is contributing more than 50 per cent of the gases, and they do not bother about that. If the same thing were to be done in India, how much uproar would have been there from those countries? They do not bother. Not only we must take the lead but, as Shri Swain has said, we must also find fault with countries like USA and we must insist that they must contribute substantially depending upon the gases that they are emitting in their own country. With three per cent or four per cent of the population when they contribute more than 50 per cent of the gases, how much should they be charged? Why should we be punished for their misuse? That also must be taken into account during the discussions in the international forums.

Sir, I do not want to take much time of the House. I would like to make a request to both the hon. Ministers – the Minister of Science and Technology and the hon. Minister of Environment and Forest. They say ecology and environment but their application is not on these things. When a project is being undertaken with Rs. 10,000 crore value, if 150 acres of land were there on the way, they say: “Stop it, do not proceed with the project for decades together.” That was the stand and that

was the ecology and environment attitude. So, my request to the hon. Minister of Environment and Forest is this. Please concentrate on an area which affects the economy and which affects the health of the people and the nation, and not technically that this is a reserve forest. Some areas are called 'reserve area' where there will not be a tree at all but they are called 'reserve area'.

My point is that all those areas which come under reserve forest, where there is not even a single plant, can be given to the poor people in the area. You need not give them the permanent right but at least you can give tree *pattas*. Let them raise fruit bearing trees. You can also give your choice of trees which helps the environment and thereby you can bring the greenery. But they say: "It is a reserve forest, and you should not enter." … (*Interruptions*)

MR. SPEAKER: In my constituency, there is an area called 'reserve area' where not even a grass is there, not even a blade of grass is there.

SHRI K.S. RAO : Sir, they do not even permit the poor people to enter.

MR. SPEAKER: I have not yet pressurised him.

SHRI K.S. RAO : They book cases and they make them to go to the courts regularly, and they harass them. Sir, I want the hon. Minister to take into account this aspect and what you have said also.

MR. SPEAKER: Not even a grass is there in some area and not in every area.

SHRI K.S. RAO : I would request the hon. Minister to see that such lands are distributed to the poor people in the local area and help them in raising trees, help them to have greenery and also help in reducing the emission of gases, thereby slowing down the global warming.

With these words, I thank the hon. Speaker for giving a lot of time, attention and importance to global warming, and also both the hon. Ministers.

श्री राम कृपाल यादव (पटना) : अध्यक्ष महोदय, मैं आपका आभारी हूं कि आपने मुझे ग्लोबल वार्मिंग जैसे महत्वपूर्ण विाय पर चर्चा करने की स्वीकृति प्रदान की है। निश्चित तौर पर इस विाय के बारे में केवल भारतर्वा ही नहीं, पूरी दुनिया चिंतित है। सारी दुनिया के लिए यह समस्या चिंता का कारण बनी हुई है। जिस प्रकार से धरती तप रही है, उसकी वजह से कई तरह की गंभीर समस्याएं उत्पन्न होती जा रही है। अगर हम इस समस्या पर नियंत्रण नहीं कर सके, तो पूरे देश का अस्तित्व खतरे में पड़ सकता है। कई माननीय सदस्यों ने इस गंभीर विाय के बारे में अपने महत्वपूर्ण सुझाव सदन के सामने प्रस्तुत किए हैं और मैं भी आपकी अनुमति से कुछ सुझाव सदन के समक्ष रखना चाहता हूं।

भारतर्वा एक गरीब देश है और 70-75 प्रतिशत आबादी खेत और खलिहान पर निर्भर है। हमारे देश में ग्लोबल वार्मिंग के कारण समय पर बारिश नहीं हो रही है, कहीं बाढ़ आ रही है तो कहीं सूखा पड़ रहा है। इन सब परेशानियों का संबंध किसी न किसी रूप में ग्लोबल वार्मिंग से ही है। इसी वजह से ही सुनामी साइक्लोन का सामना करना पड़ा। गंगा नदी जैसी नदियां भी सूख रही हैं और दिन-प्रतिदिन कई तरह की समस्याएं उभर कर सामने आ रही हैं। सूर्य की किरणें ओजोन लेयर से फिल्टर हो कर आया करती थीं, वह फिल्टर न होने की वजह से वौाले पदार्थ नहीं मर रहे हैं और इस वजह से चर्म रोग, कैंसर तथा कई तरह की

गंभीर बीमारियों से ग्रसित हो रहे हैं। भारतर्वा में एक मिलियन से ज्यादा लोग वायु प्रदूाण की बीमारी से ग्रसित हैं तथा इससे संबंधित कई प्रकार की बीमारियां बड़े पैमाने पर लोगों को अपना शिकार बना रही हैं। वायु प्रदूाण दिन-प्रतिदिन बढ़ता जा रहा है। हमारे जंगल काटे जा रहे हैं, लेकिन और जंगलों को लगाने का काम नहीं किया जा रहा है। अगर हम जंगलों को लगाने का काम नहीं करेंगे, तो आने वाले दिनों में स्थिति इससे भी ज्यादा खतरनाक हो जाएगी।

सदन में उद्योगों की चर्चा की गई है। हम विकासशील देश हैं। निश्चित तौर पर हम आवश्यकता के अनुसार उद्योग लगा रहे हैं और हम कैमिकल्स का उपयोग भी कर रहे हैं। इस कारण हमारी यमुना नदी का अस्तित्व खतरे में पड़ गया है। पहले हमारा पटना शहर बिलकुल गंगा नदी के पास था, लेकिन आज गंगा नदी पटना से लगभग 20 किलोमीटर दूर चली गई है। पटना से गंगा नदी का अस्तित्व समाप्त हो रहा है। यह बहुत चिंता का विाय है। मैं कहना चाहता हूं कि केवल चिंता करने से ही समस्या का समाधान नहीं होगा। पूरी दुनिया को इस संबंध में पहल करनी चाहिए, बल्कि मैं कहूंगा कि भारत को इस समस्या का समाधान करने के लिए पहल करनी चाहिए और ठोस उपाय ढूंढने चाहिए, अन्यथा जिस परेशानी से हम सब लोग जूझ रहे हैं, वह परेशानी आने वाले समय में और बढ़ती जाएगी। जितनी ज्यादा पृथ्वी गर्म होगी, उतनी ही स्थिति और बिगड़ती चली जाएगी। इस समस्या से निपटने के लिए ठोस उपाय निकालना बहुत जरूरी है, क्योंकि आज पूरा भूमंडल गर्म हो रहा है।[R33]

18.00 hrs.

अभी हाल ही में हम सब लोगों को समाचार पत्रों के माध्यम से यह जानकारी मिली है कि अगर इसे नियंत्रित नहीं किया गया तो निश्चित तौर पर सभी नदियां सूख जाएंगी। उस समय क्या होगा? आज किसान आत्महत्या कर रहे हैं, समय पर बारिश नहीं हो रही है, नदियों में पानी खत्म हो रहा है, असमय बारिश होती है, कही बारिश बहुत होती है और कहीं बिल्कुल नहीं होती है। इसका असर कृाि पर पड़ रहा है।

MR. SPEAKER : Hon. Members, we have reached 6 o' clock. Can we continue for some time more?

THE MINISTER OF STATE IN THE MINISTRY OF CHEMICALS AND FERTILIZERS AND MINISTER OF STATE IN THE MINISTRY OF PARLIAMENTARY AFFAIRS (SHRI B.K. HANDIQUE): Sir, the discussion may be completed today.

श्री रेवती रमन सिंह : इस पर चर्चा कल भी करवा दीजिए।

MR. SPEAKER : The discussion will be completed today. The hon. Ministers will reply tomorrow.

श्री राम कृपाल यादव : आज कार्बन डाइआक्साइड की मात्रा बढ़ रही है, ऑक्सीजन की मात्रा घट रही है। सरकार को योजना बनानी चाहिए जिससे प्रदूाण को रोका जा सके। आज बड़े पैमाने पर शहरीकरण हो रहा है। कचरा बगल के नदी-नालों में फेंक दिया जाता है जिससे कई तरह की बीमारियां उत्पन्न हो रही हैं। इससे नए-नए रोगों का इजाफा हो रहा है। हर साल कई तरह की नई बीमारियां आ रही हैं। इन सब का कारण भी यही है। बड़े पैमाने पर चर्म रोग हो रहे हैं। इसके भी कारण यही हैं। इस मामले में सरकार को कोई ठोस उपाय करने चाहिए।

अध्यक्ष महोदयः इसमें जनता को भी आगे आना चाहिए।

श्री राम कृपाल यादव : आपने ठीक कहा कि जनता के सहयोग के बिना कुछ नहीं होगा। मैं पटना शहर की बात कहना चाहता हूं। यहां बहुत से लोग शहरों से संबंध रखते हैं। वे घर से कचरा निकाल कर बाहर फेंक देते हैं।

अध्यक्ष महोदयः कोलकाता में भी होता है।

श्री राम कृपाल यादव :इसमें जब तक जनता का सहयोग नहीं मिलेगा तब तक कोई सरकार इसे ठीक नहीं कर सकती है। बड़े पैमाने पर जंगलों को काटा जा रहा है। हम संकल्प लें कि हर घर का एक व्यक्ति एक पौधा लगाएगा। सरकार तब तक सफल

नहीं हो पाएगी जब तक उसे हम लोगों का सहयोग नहीं मिलेगा। हमारी जनसंख्या रोज बढ़ती जा रही है। एक अरब से अधिक की आबादी हो गई है। यह भी हमारे लिए परेशानी का एक बड़ा कारण है। हम आबादी पर कंट्रोल नहीं कर रहे हैं। शहरीकरण हो रहा है। पेड़-पौधे काटे जा रहे हैं। हरियाली समाप्त होती जा रही है। जनसंख्या भी एक बड़ा कारण है। जब तक लोगों में अवेयरनैस नहीं आएगी, लोग अहमियत नहीं समझेंगे कि पेड़ों का क्या महत्व है, गंदगी उत्पन्न होने से क्या दुपरिणाम होंगे, कल-कारखानों से जो कैमिकल्स निकलेंगे, उनके क्या दुपरिणाम होंगे, तब तक इस काम में सफलता नहीं मिलेगी। इन तमाम चीजों पर निश्चित तौर पर सोचने की आवश्यकता है।

गंगा प्लान की बात की जा रही थी। इसकी कई स्कीम्स बनायी गईं और हजारो-करोड़ रुपए आवंटित किए गए लेकिन उसका कोई असर नहीं पड़ा। गंगा प्लान फेलियर हो गया। क्या गंगा की सफाई हो रही है? जहां-जहां से गंगा गई चाहे इलाहाबाद या पटना से गई, वहां सारे के सारे कचरे फेंके जा रहे हैं। ट्रीटमैंट प्लांट लगाने की बात कही गई। ट्रीटमैंट प्लांट कहां लगे हैं, इस पर निश्चित तौर पर गौर करने की आवश्यकता है। जितने भी ट्रीटमैंट प्लांट लगे थे, सारे के सारे खत्म हो गए। मैं समझता हूं कि यह स्थिति दूसरे शहरों में भी पैदा हुई होगी।

मुर्दाघाट बनाने के लिए एक योजना बनी थी। लाश को जलाने वाली सब मशीनें खराब पड़ी हैं। ...(व्यवधान) आपने इसके लिए पैसा दे दिया लेकिन उसे ठीक से मेंटेन नहीं करेंगे तो वे कैसे काम करेंगी। गरीब राज्य उन्हें कैसे मेंटेन कर सकते हैं। इसकी मशीनें काफी मंहगी आती हैं। वे बंद पड़ी हैं। सारे मुर्दे और मरे जानवर नदियों और नालों में बहा दिए जाते हैं। डीजल और पैट्रोल के उपयोग से भी कार्बन डाइआक्साइड पैदा हो रही है।[a34]

अगर हमने आने वाले दिनों में इसे संभालने का काम नहीं किया तो समुद्री तट पर स्थित सभी शहर डूब जाएंगे, जैसा अभी हाल ही में मद्रास में हुआ है, जानमाल की बहुत क्षति हुई। इसके साथ गंगा समाप्त हो जाएगी, बीमारियों का खौफनाक हमला होगा और जो खतरनाक स्थिति पैदा होगी, उसका चित्रण करने से ही डर लगता है। इसलिए निश्चित तौर पर हमें यह पता होना चाहिए कि सरकार ने इस दिशा में क्या पहल की है, इस बारे में क्या सोचा जा रहा है, प्रदूाण रोकने के लिए किस तरह से उपाय किए जा रहे हैं और किस तरह से पेड़ों को लगाने की बात हो रही है?

महोदय, नियम तो बहुत बनते हैं, पॉलिसियां भी बहुत बनती हैं लेकिन पॉलिसियां बनने से कुछ होता नहीं है। प्रदूाण के नाम पर, पौधे और जंगल लगाने के नाम पर लाखों करोड़ों रुपए बर्बाद हो रहे हैं, उनसे कोई लाभ मिलता नजर नहीं आ रहा है। इसकी मॉनिटरिंग की जानी चाहिए। आप पैसे देते हैं और काम नहीं होता है, इसका क्या फायदा है? मैं अभी अपनी बात समाप्त करता हूं।

अध्यक्ष महोदय : आप वाक्य पूरा करके खत्म कीजिए।

श्री राम कृपाल यादव : मैं अपनी पार्टी से पहला वक्ता हूं।

अध्यक्ष महोदय : एक ही वक्ता का टाइम है।

श्री राम कृपाल यादव : मेरे पास समय तो बहुत है।

अध्यक्ष महोदय : आठ मिनट समय था।

श्री राम कृपाल यादव : सिर्फ आठ मिनट हैं।

अध्यक्ष महोदय : क्या करें?

श्री राम कृपाल यादव : मेरी पार्टी का ज्यादा टाइम होना चाहिए था।

अध्यक्ष महोदय : अगली बार बड़ी पार्टी होकर आइए।

श्री राम कृपाल यादव : अभी हम दो साल नहीं जा रहे हैं।

अध्यक्ष महोदय : आपके बोलने का समय आठ मिनट है और हम आपको बारह मिनट का समय दे रहे हैं।

श्री राम कृपाल यादव : आपने बहुत कृपा की है, आप मुझ पर कृपा करते रहते हैं।

अध्यक्ष महोदय : हमें उसका असर भी नजर आता है।

श्री राम कृपाल यादव : मैं थोड़ी देर में अपनी बात समाप्त कर दूंगा, मेरी वजह से आपको परेशानी उठानी पड़ती है, इसके लिए मैं क्षमा चाहता हूं।

अध्यक्ष महोदय : धन्यवाद।

श्री राम कृपाल यादव : मैं आपसे निवेदन कर रहा था कि आज निश्चित तौर पर पूरी दुनिया में इस विाय पर चिंता हो रही है। यहां साइंस एंड टेक्नोलॉजी मंत्री बैठे हैं, अच्छा हुआ वे पहले नहीं बोले, वे बाद में सब लोगों की बात सुनकर बोलेंगे और कोई ठोस उपाय बताएंगे। पर्यावरण मंत्री चले गए हैं?

MR. SPEAKER: He is here.

श्री राम कृपाल यादव : यहां राजा साहब बैठे हुए हैं, लेकिन पर्यावरण मंत्री कहां हैं?

MR. SPEAKER: He is Minister of Environment and Forests.

श्री राम कृपाल यादव : कम से कम जो विकसित देश हैं, जब तक वे अपने आपको नियंत्रित नहीं करेंगे, तब तक हमारे जैसे िवकासशील देश, जिनकी वजह से कम परेशानी हो रही है, इसे कैसे नियंत्रणकरेंगे? इसलिए विकसित देशों को इसमें पहल करनी चाहिए। जब पूरी दुनिया चिंतित है तो निश्चित तौर पर आम लोगों का सहयोग लेकर कोई ठोस उपाय करने चाहिए ताकि जंगल बचे, हरियाली बचे। प्रदूाण दूर करने का मुख्य आधार जंगल है, इसे हम बरकरार रखें। आम लोग गंदगी फैला रहे हैं, इस संबंध में अवेयरनेस योजना चलाकर देश औरदुनिया को जीव-जंतुओं को बचाना चाहिए। आज सब जीव-जंतुओं पर प्रैशर है। उनको बचाने की जरूरत है। अगर ऐसा नहीं होगा तो आने वाला समय बहुत भयंकर और भयानक साबित होगा। अगर हम इसे नियंत्रित नहीं कर पाए, कोई ठोस उपाय नहीं कर पाए तो पूरी दुनिया का अस्तित्व, जीव-जंतुओं आदि काअस्तित्व ही समाप्त हो जाएगा। इसके साथ ही मैं आपसे निवेदन करता हूं और आशा करता हूं कि माननीय मंत्री जी कुछ ठोस उपाय निकालेंगे। इस संबंध में भारत को पहल करनी चाहिए।

अध्यक्ष महोदय : आपकी बात समाप्त होने पर ही जवाब देंगे।

श्री राम कृपाल यादव : इन्हीं चंद शब्दों के साथ मैं अपनी बात समाप्त करता हूं। आप ठोस उपाय बताएं और पहल करें ताकि ग्लोबल वार्मिंग की वजह से जो जीव-जंतु तहस-नहस हो रहे है, दूसरी समस्याएं सामने आ रही हैं, उनसे बचाने का हम प्रयास करें।

श्रीमती रंजीत रंजन (सहरसा): मैं आपके माध्यम से मैं कहना चाहती हूं कि सदन में हम बहुत गंभीर विाय पर चर्चा कर रहे हैं। असल में आज यह चर्चा का विाय ही नहीं रह गया है। हमारे पास अब इतना वक्त ही नहीं है कि हम इस बारे में चर्चा करें, बल्कि अब हमें क्या करना चाहिए, इस पर ध्यान देने का वक्त है। ग्लोबल वार्मिंग की तरफ हमारा ध्यान तब गया जब ग्लेशियर पिघलने शुरू हो गए। ग्लेशियर तब पिघलने शुरू हुए, जब ओजोन की परत पतली होने लगी और ओजोन की परत कार्बन-डाई-ऑक्साइड और सीएफसी गैस, जो हमारे घरों में रैफ्रीजरेटर, एसी और रॉकेटों में यूज होने वाले फ्यूल के कारण पतली होनी शुरू हुई। [r35]

मैं आपसे एक ही बात कहना चाहूंगी कि आज जो ग्लोबल वार्मिंग हो रही है, उसमें हमारा ध्यान प्रिवैन्शन पर ज्यादा है कि हम कैसे बचाव कर सकते हैं, परंतु हमारा ध्यान ट्रीटमैन्ट पर नहीं है कि हमारे साथ जो कुछ हो चुका है, पृथ्वी को जो नुकसान पहुंच चुका है, उसका ट्रीटमैन्ट कैसे होगा, हम उसका बचाव कैसे कर पाएं। आज हम लोगों को सबसे पहला काम यह करना चाहिए कि जो कार्बन डाईऑक्साइड करंट मात्रा में है, हम उसे कैसे मैनेज करें। इसके लिए प्लान्टेशन की जरूरत है। लेकिन हम प्लान्टेशन न करके अधिक से अधिक पेड़ों को काट रहे हैं। इसके लिए हम चाहे जितने भी कानून बनायें, लेकिन यह हो रहा है। इसके अलावा जो सी.एन.जी. हमने मैट्रो सिटीज में शुरू की है, यह बहुत लोकलाइज है, लेकिन अभी तक हम अपने देश के समस्त राज्यों के रूरल एरियाज में इसे शुरू नहीं कर पाये हैं। हम दूसरे राज्यों में सी.एन.जी. के इस्तेमाल को गंभीरता से कानून के जरिये से लागू क्यों नहीं कर सके हैं?

अध्यक्ष महोदय, मैंने पैट्रोलियम मिनिस्ट्री की एक मीटिंग में भी इस बात को उठाया था कि जो हमारी पुरानी रिफायनरीज हैं, उनसे और अधिक मात्रा में तेल निकले, उसके लिए हम अधिक से अधिक मात्रा में कार्बन डाइऑक्साइड छोड़ते हैं, ताकि तेल ऊपर आये, जिसके कारण कार्बन डाइऑक्साइड, चाहे वह धरती के नीचे हो या बाहर हो, बहुत ज्यादा मात्रा में हमें पॉल्यूट कर रही है। यह भी ग्लोबल वार्मिंग का एक कारण बनता जा रहा है। मैं कहना चाहूंगी कि यदि हमें ग्लोबल वार्मिंग पर गंभीरता से सोचना है तो हमें सौर ऊर्जा की ओर बहुत अधिक ध्यान देना पड़ेगा। क्योंकि ग्लोबल वार्मिंग के कारण हमारा जो नुकसान हो रहा है, उसके कारण हमें और हमारी आने वाली पीढ़ियों को सिर्फ पानी ही नहीं मिलेगा, बल्कि कहीं पर बहुत अधिक सुखाड़ होगा और कहीं पर बारिश होगी। इसके अलावा जो बीमारियां फैल रही हैं और जो आए दिन कुछ लोगों की विक्षिप्त मानसिकता को दर्शाया जा रहा है, जो आए दिन मीडिया और टी.वी. में देखने को मिलती है, वह भी ग्लोबल वार्मिंग का ही एक उदाहरण है, जिसके कारण लोगों की मानसिकता भी बदलती जा रही है।

अध्यक्ष महोदय, आज हमें क्या करना चाहिए, हम अपने आसपास किस तरह के एनवॉयरनमैन्ट के लिए अवेयरनैस फैला रहे हैं और हम खुद इसके बारे में अवेयर हैं या नहीं कि हमारा एनवॉयरनमैन्ट कैसा हो और हम खुद इसके लिए क्या कर रहे हैं। आज नेचर ने अपना काम करना शुरू कर दिया है। आज जहां पर बारिश नहीं होनी चाहिए, वहां बारिश हो रही है, जहां पर होनी चाहिए, वहां नहीं हो रही है। जहां बर्फ नहीं पड़नी चाहिए, वहां ओले पड़ रहे हैं। आज हम वक्त से बहुत पिछड़ गये हैं। अब हमें सिर्फ इतना करना है कि जो जख्म हमने नेचर को दिये हैं, अब उनको भरने की बारी आई है। क्योंकि नेचर तो एक पलटी खाकर फिर से अपने अस्तित्व में आ जायेगा, लेकिन मनुय अपने अस्तित्व में दोबारा नहीं आ पायेगा। हमारा अस्तित्व तो खत्म होगा ही, बल्कि हमारी आने वाली पीढ़ियों को भी हम इस धरती में अस्तित्व नहीं दे पायेंगे। मैं इतना कहना चाहूंगी कि आज जो हमारा वक्त है, वह इस पर सिर्फ डिस्कशन के लिए नहीं है। आज हमारे पास चंद साल बचे हैं। कभी हम लोग बचपन में सुना करते थे कि हमारे ग्लेशियर शायद कई वर्षों बाद पिघल जाएं। आज वह वक्त आ चुका है। अब हमारा काम सिर्फ यह है कि हमें इससे कैसे बचना है, हम किस तरह से अपना बचाव कर सकते हैं। इसके बारे में मैं एक प्वाइंट और कहना चाहूंगी कि जो ग्रीन हाउस गैसेज हैं, उसके विरोध में लगभग सौ देश हमारे साथ हैं। इसमें जो ग्रीन हाउस गैसेज वाले कंट्रीज, जैसे अमरीका आदि हैं, हमें उन पर भी दबाव बनाना चाहिए। क्योंकि यह पूरी अर्थ का मामला है, ग्लोबल वार्मिंग का मामला है। हम लोगों को अब क्या करना है, हम लोग क्या कर सकेंगे, उस बारे में हमें सोचना चाहिए। इतना कहकर मैं अपना वक्तव्य समाप्त करती हूं।

SHRI MANVENDRA SINGH (BARMER): Sir, I thank you for the opportunity given to me take part in this debate. The previous speakers have covered all the theories, all the data from the international capitalist conspiracy to all kinds of other factors responsible for this gravest human crisis.

I will just point out two tangibles. In the last calendar year, there was a shortfall of rain in Kerala and Assam and there was flooding in my constituency of Barmer and in Leh.[r36] India's two

desert zones have flooded. So, States which expect more rains have scanty rainfall. That itself is an indicator that global change has happened. It is not a question of when it is happening but it has happened. I do not think we need any more graphic example than that. Gangotri glacier was receding at the rate of 17 metres per annum in the 20th century. Now, in the 21st century, it has been recorded that it is receding at the rate of 26 metres per annum. That, Sir, is a frightening figure and it calls for very serious concern to be expressed as well as action to be taken.

Humankind is responsible for this phenomena. It is anthropologic. It has been singly proven that humankind is responsible. To get out of this phenomena, the global community got together with the Kyoto Protocol. My previous speakers have gone into the details of Kyoto. I will not repeat that except that principal pollutant remained out of it to protect the American way of life. We can blame them for a lot of things; we can blame them for this also. A lot of speakers said that we have to clean up our house first. I beg to differ with that because if India is to take leadership in the world, it has to set the leadership by example. If they made a mess, it does not mean, we continue not to take action because they made a bigger mess. We have to set an example; set our house in order; and create that environment globally that India has taken the leadership role as a solution-find country rather than a blaming country.

So, in India, the biggest polluter/pollutant and the cause of the major pollution in this country is the Government. India has the worst energy-efficient record in the world. All the thermal power plants owned by the Government of India produce energy at the most inefficient levels. The Government consumes the maximum energy in this country. It consumes that energy in the most inefficient manner. All Government buildings are designed in the most energy-inefficient manner.

I will just give an example. We are sitting in this very beautiful hall. We do not have a trace of natural light coming into this building. To sustain this building; to sustain our work in this building, we do not have a single source of natural light. It is without fail that of all the democracies in the world, India has the highest reserves of solar energy. No democracy in the world receives as much solar energy as India does. Despite that, our buildings, however, beautiful they might look from the exteriors, if they do not use that energy, if they do not use that perennially cleanest source of energy, I think, those buildings fail to do their jobs.

MR. SPEAKER: Lutyen's did not think of it.

SHRI MANVENDRA SINGH : It is time we think of it.

MR. SPEAKER: Very good.

SHRI MANVENDRA SINGH : If we clean up resources, we set an example. You have taken the leadership role in giving us an opportunity for this debate. I would request you to take a leadership role in providing this great building using solar energy to the maximum possible to sustain our work in this building.

MR. SPEAKER: At least, I have stopped smoking.

SHRI MANVENDRA SINGH : That is also an example for us. A part of the cleaner process, as the Government setting an example, I gave the examples of power production, power-inefficient use, buildings.

Another gross example of Government participation in pollution is our participation in the Asia-Pacific Partnership. Fifty per cent of the world's polluting countries are part of that grouping, and we are part of that and that APP is essentially a mechanism to escape from the responsibility of Kyoto. We touted this membership as the collection of expanding economies and it is an escape from us c[r37]onducting our job properly. I would request the Government, as a part of setting example, to walk out of the APP, saying that that body does not make it mandatory on emission controls and emission cuts.

The bad example is this. If you happen to look at the budget papers, under the Department of Non-Conventional Energy Sources, the annual allocation is actually less than what is there on VIP security in Delhi. These are black and white figures and I do not need to say more than this. That, in itself, is a scandal. A country that is so rich in solar has only this much in its allocation.

I had tried, for the last few days, to get data on how much we spend on R&D in non-conventional energy or renewable energy sources. For the life of me, I could not find how much we spend. I would request the two Ministers sitting here and particularly Shri Sibal, to share the data with us as to how much the country spends on R&D in renewable sources of energy.

The last point that I have is that we need to re-work on the Clean Development Mechanism, which Shri Prabhu mentioned earlier. We are a member of that. The country that is polluting more than us is Europe, which has got into a mechanism with us and so, they sustain some activities in India. Of course, India is the largest beneficiary of CDM. We have the largest number of projects underway. But most of the projects are actually not at the high end of technology.

The efficiency of those units used to be about 15 dollars per unit and it has now come down to 60 cents per unit. That, in itself, shows how serious they are about sustaining these projects. There is not a single CDM project in the public sector, which, as I said earlier, is the biggest polluter.

I conclude by repeating this – we had this opportunity before us today to debate this. I would request you, Sir, to use your Offices to have an all party gathering on global warming, on climate change, have tangible benchmarks on what we have to achieve, and also to use this great building, as an example of how to use solar energy efficiently.

DR. K. DHANARAJU (TINDIVANAM): Sir, thank you very much for giving me the opportunity to record my views on this important subject.

Sir, I have a specific answer to the questions that are raised, because nature wants India to be on top of the countries of the world. One of my professors told me this. … (*Interruptions*)

श्री रेवती रमन सिंह : अध्यक्ष महोदय, हाउस कितने बजे तक चलेगा?

अध्यक्ष महोदय : 7 बजे तक।

श्री रेवती रमन सिंह : कल भी इस पर बहस होगी?

अध्यक्ष महोदय : कल जवाब होगा।

श्री रेवती रमन सिंह : हम लोगों का तो नंबर ही नहीं आ पाएगा।

अध्यक्ष महोदय : आपका पार्टी टाइम भी खत्म हो गया है। The time has already exceeded. हम कोशिश करेंगे। आज इसे खत्म करना है।

श्री रेवती रमन सिंह : मेरा एक निवेदन है कि कल कुछ देर और इस पर चर्चा करा दीजिए और फिर जवाब करवा दीजिए। मैं आपको बधाई देता हूँ कि आपने इस विाय पर चर्चा कराई।

MR. SPEAKER: That is why, we have allowed. We shall allow a four-hour debate. हम कोशिश करेंगे।

DR. K. DHANARAJU : Sir, that is why, nature has given us so much of Sun shine and sea water.

For all the questions and the suggestions expressed by the hon. Members, I have an answer. In my constituency, there is a place called Auroville. It is an international city and it is under the direct control of the Central Government. We only manage it; the Ministry of Human Resource Development only manages that city. They adopt all these techniques there. They do not use chulah bricks. They do not cut trees. They use only mud blocks for building constructions. They use solar cookers only. They say that they have the second largest solar kitchen. Every day they feed thousands of people residing in that city. They run all the generators only using the plant oil. I was there on the last World Earth Day. They advised me to switch over to solar panel on the vehicles. I have taken up the solar panel. It is being fixed on my vehicle and now my car battery is charged only by the solar cell.

MR. SPEAKER: It is very good.

DR. K. DHANARAJU : At the same time, they also advised that instead of fossil fuel diesel, it can be blended with 10 percentage plant oil. The plant oil that they suggest is, the *pungam pinatha* oil. It is got crushed from the *pungam* seed. They tried that and for all these things they do research and implement them. So, if those discoveries are taken, all the techniques are taken throughout the country then we will be able to reduce heat, Sir.

This is a global phenomenon. Nature loves symmetry. It is the law of nature. When we disturb the symmetry, naturally the reaction is very dangerous and, therefore, there is an increase in temperature.

SHRI REWATI RAMAN SINGH : Mr. Speaker, Sir.

MR. SPEAKER: We will allow some more discussion tomorrow also. This is in recognition of the great interest taken by all the hon. Members to whom I am deeply obliged. We are now under Shri Radhakrishnan's control.

18.27 hrs. (Shri Varkala Radhakrishnan *in the Chair*)

DR. K. DHANARAJU : We are living on the earth. If we take earth as a system and look at this phenomenon from the Physics and Chemistry points of view, whenever there is an increase in temperature in any system, they apply the Thermodynamics principles. In Physics, they have factors called 'Entropy' and 'Enthalpy'. Whenever the factors have positive value, there is always disorder. That is what is happening in our earth. Therefore, to reduce the effect and to make it reversible what methods we are going to adopt.… (*Interruptions*) Knowing the cause and effect. We should look for reducing the temperature. All these things are not instantaneous or sudden effect. It has manifested since the time of formation of earth itself. However, everybody on the earth is party to it. We need not blame any country. Ultimately after the Report published by the IPCC, we have started on the count down effect.

MR. CHAIRMAN: Please conclude now.

DR. K. DHANARAJU : No, Sir. There were a lot of interruptions.

They say that the average temperature has increased by 5 degree centigrade. Therefore, Sir, what I want to say is that in order to reduce all these effects, some active study is required.

MR. CHAIRMAN: Global warming is applicable to the House also. So, there must be some limit.

DR. K. DHANARAJU : Yes Sir. We should warm up for a war against global warming. That is what we are doing. Therefore, what I want to say is, what methods are to be adopted to reduce the temperature. In this connection, I had asked two questions two years before. What is the study going on about this? The Departments of Ocean Technology and Science and Technology have told that there is no active study going on as such. Therefore, we should form an active group and monitor it constantly.

This afternoon, I saw a TV footage shown by NASA regarding a collision of two stars in the space. They also said that if this incident happens nearer to our galaxy, there would be formation of a new Earth. They have also said that in the year 2100, we will have to seek for another Earth in order to shift from this Earth. Considering all these things, what I want to say is that techniques that are followed in Auroville should be followed. They follow modern techniques. They do not use grid power. They do not use the municipality water. They do not use things which may increase the temperature. In an eco-friendly manner, they adopt all the modern techniques. Those techniques will have to be extended.

With these words, I conclude. We have to act very quickly to control all these things.

SHRIMATI JHANSI LAKSHMI BOTCHA (BOBBILI): Sir, global warming is the increase in the average temperature of the Earth's near-surface air and oceans. Global average air temperature near the Earth's surface rose significantly during the past century. Global warming is warming the globe. So now-a-days, cold days, cold nights have become less frequent. Hot days, hot

nights and heat waves have become more frequent. Sir, the Inter-Governmental Panel on Climate Change (IPCC) says and I quote:

> "Most of the observed increase in globally averaged temperatures since the mid-20th century is due to the observed increase in anthropogenic green house gas concentrations."

It leads to warming of the surface and lower atmosphere by increasing the green house effect. Most national Governments have signed and ratified the Kyoto Protocol aimed at combating green house gas emissions. Kyoto will only postpone temperature rise, rather than prevent it. Natural phenomena such as solar variation combined with volcanoes have probably had a small warming effect from pre-industrial times to 1950, but a cooling effect since 1950. Warming and sea level rise are expected to continue for more than a millennium even if green house gas levels are stabilized. This shows the large heat capacity of the oceans. An increase in global temperatures can in turn cause other changes, including sea level rise and changes in the amount and pattern of precipitation. Other effects include changes in agricultural yields, glacier retreat, reduced summer stream flows, species extinctions and increases in the ranges of disease vectors. We have already seen in the Himalaya Mountains glaciers retreating alarmingly. It will pose a threat to our lives causing floods. We should not overlook the fact that our major rivers, particularly the Ganga is getting polluted.

The amount of money spent on cleaning the Ganges has not yielded the desired results. The vector-borne diseases are manifesting in the tribal areas of Andhra Pradesh. I have already requested the hon. Minister of Health to open an institute of vector-borne diseases at Vizianagaram, Andhra Pradesh. But the matter is yet to be considered.

The gases like carbon dioxide, methane and nitrous oxide along with water vapour are called Greenhouse gases. Carbon dioxide is released when we burn fuels like coal, oil and natural gas. When we destroy forests the carbon stored in trees escapes as carbon dioxide into the atmosphere. It also causes changes in land use patterns and other sources leading to rising levels of methane and nitrous oxide. Industrial processes release artificial greenhouse gases like Chloro Floro Carbons. All these result in the warming up of the atmosphere.

The ozone layer which is present between the altitudes of 15 and 35 kilometres in the stratosphere safeguards life on the Planet by absorbing harmful ultraviolet rays of the Sun.

The Industrial Revolution in the 19th century saw large-scale use of fossil fuels for industrial purposes. The energy sector is responsible for about three-fourths of carbon dioxide emissions. There is a relation between atmospheric carbon dioxide concentrations and climate change.

Changes in land use pattern, deforestation, large agriculture and other activities have led to a rise in emission of carbon dioxide. There is a news report that for the Commonwealth Games some trees are going to be uprooted in Delhi. There is already opposition from the public against this action. I hope, the Government would find an alternative ground for the rugby games.

It would be better to invest in cleaner technologies such as solar power and wind power. The impact of global warming should receive much more attention in the public debate.

The Government should create a fund for controlling global warming. There should be public awareness campaign on the dangers of global warming; otherwise, it would overtake us and we would not be able to check it, if not prevent it. The future generation will not forgive us for not tackling it effectively.

SHRI M.P. VEERENDRA KUMAR (CALICUT): Sir, thank you for giving me the time. I would not like to go into the various details of global warming since they have already been made here.

Sir, it is true that there is climatic variation. What is the real reason for that? In tropical belts like Kerala and elsewhere, there are only two climates – extreme climate, either there are heavy rains and floods, or drought. There is no intermediary climate. What has happened to that? In a tropical belt I understand the stabilization of climate is done by forests. Where are the forests now?

I will give an example of my own self. In the year 1987, I became the Minister of Forests in the Government of Kerala. I issued an order that no trees shall be cut from the forests. Forests should not be treated as revenue. It is natural capital. Within 48 hours I had to resign as a Minister. Then I understood that forests cannot be saved. The only way to save it is to finish it. Forests are the origin of rivers. There are 44 rivers in the State of Kerala. [R38] There is water scarcity. Why? It is because of pollution and the level of water is slowly receding in the rivers. There should be tree cover on the land to prevent erosion. There are learned people present here. If one inch of the top soil is lost, for billions of years, nothing will grow there. There will be no habitation then, whether human beings or animals. It is gone for ever. What is the level of erosion in this country? So, denuding of forests is really a serious matter.

Global warming caused by human beings not only threatens the entire world but the whole planet is threatened. The question now is whether the living beings will survive but whether the planet itself will survive. Our concept earlier was that earth needs us. Now, the Earth does not need us, but we need the Earth. Oxygen never said to come and breath it. Nobody said that Water never said to come and drink it. We need water. We have to save it and we have to have a policy for it. At least, can the Government say, with one voice, that forest is no more a revenue but it is a capital. Can we not say it?

I was recently travelling in the Himalayan area for two reasons. One is to find out what is happening there and secondly it is due to anguish. Ganga is dying. It is not that Ganga is dying. We are killing Ganga. We are murdering Ganga. Brahmaputra and Ganga are gone. By the end of this century, Ganga will be finished.

The glaciers are melting. The threat of deglaciation of 38 per cent of the small glaciers in the Himalayas, over a 40 year period from 1962, in a study conducted by ISRO's Space Applications Centre, Ahmedabad, is a major concern for us. The melting of the Gangotri Glacier, one of the largest, is accelerating at an average retreat rate of 30 metres annually. Gangotri is going back everyday. It is receding everyday. Nepal's Khumbu Glacier is receding three miles a year. I do not

want to quote all the figures. Sir, photos of the Pindari Glacier in the Kumaon Hills taken over a 70 year interval from October, 1936 by a forester and legendary wildlife photographer Mr.F.W. Champion and his grandson reveal a frightening receding of glacial ice and it is just a trickle in place of a rich perennial flow amidst denuded mountains. The ablation of 15,000 Himalayan glaciers that feed seven great rivers of Asia like the Ganga and the Brahmaputra is a major problem. This glacier is receding and these rivers will die.

It will be catastraphic. Can we imagine a day in this country without Ganga and Brahmaputra? It is not only an emotional and sentimental thing but materially, what will happen? How many thousands and millions of people will be wiped out? What is the solution for that? Have we ever thought about it?

Sir, the glaciers are melting faster than anyone thought of. Fresh research by Chinese scientists shows, as global warming speeds up, the shrinkage of more than 80 per cent of the 46,377 glaciers on the lofty plateau. The Himalayas is our boundary. We used to say that it protects us. The entire Himalayas is going to be dead now. Are you not concerned about it? Forget all our religious parameters or sentiments. Materially, what will happen to the human race?

Drought threatening the lives of millions will spread across half the land surface of the earth in the coming century because of global warming, according to new predictions from Britain's leading climate scientists. Extreme drought, in which agriculture is in effect impossible, will affect about a third of the planet according to the study from the Met Office's Hadley Centre for Climate Prediction and Research. It is one of the most dire forecasts so far of the potential effects of rising temperatures around the world, yet it may be an underestimation, the scientists involved said.

The study, by Eleanor Burke and his two Hadley Centre colleagues, models how a measure of drought known as the Palmer Drought Severity Index, PDSI, is likely to increase globally during the coming century with predicted changes in rainfall and heat around the world because of climate change. It shows the PDSI figure for moderate drought, currently at 25 per cent of the Earth's surface, rising to fifty per cent by 2100, the figure for severe drought, currently at about eight per cent, rising to forty per cent, and the figure for extreme drought, currently three per cent, rising to thirty per cent.

So, what an alarming situation! Now, we have to take a holistic approach. I do not want to go into the details of Kyoto Protocol, etc. They were talked about and discussed by hon. Members here. We need not emulate the West for everything. Technology is for man and we are not for technology. We use technology to solve the problems and not to create problems.

Let me come to power sector. Everybody said that we should have alternative source of power. But nuclear energy is not an alternative power. What will you do with the waste that comes out of the nuclear reactors?

Dr. Raja Ramanna was once sitting by my side in a meeting. He did not know who I am. He asked me: Who are the fools in Kerala protesting against nuclear reactors? I told him: "I am one among the fools." I also told him that scientists would talk about science, but we people know the

affect of it. Science may help us in many ways. For 25,000 years the affect of radiation from Chernobyl and Three Mile Island will last. I do not want to narrate it.

When there was a nuclear toot in Pokhran, it was said: "Buddha was smiling." Buddha was not smiling. In fact, Buddha was crying.

Nuclear energy is not a solution. We have to find new solutions. We must have a holistic approach in our industrial and environmental policies. People are saying that sensex is rising. Temperature is also rising. Global temperature is rising like sensex.

I agree with one hon. Member who asked us to examine why the Third World countries should refuse to buy goods from America. It is the first step and a positive step to ward off the effects of global warming. It is no longer the fantasy of environmentalists and dreamers who sit and say many things. We want sustainable development. We have to save our environment. Global heating will end the world. … (*Interruptions*)

I will conclude my speech by quoting a chief seattle, who said:

> "If all the beasts were gone, man would die from a great loneliness of the spirit for whatever happens to the beasts will soon happen to man, all things are connected."

SHRI RAVICHANDRAN SIPPIPARAI (SIVAKASI): Sir**,** Earth is the only Planet that is inhabitable to man in this universe. This paradise on Earth is being converted to be a desert and it is facing the imminent threat of danger to the species on Earth . I find this opportunity a historic moment to participate in this discussion on Global Warming in which all the members are expressing our concern in unison cutting across the party lines to express our solidarity with the responsibilities to arrest the trend of further degradation in the wake of Global Warming. The atmosphere that was conducive for about six and a half lakhs of years has gone through a phenomenal change and the continued emission of greenhouse gases like carbon dioxide, carbon monoxide and methane have caused great damage in the past year. The great depletion in the ozone layer and the impact of Global Warming are on the increase in the last 11 years in a given period of 150 years. In this back drop we have already started realizing the negative effects of global warming. Last year in Mumbai there was unprecedented rain in a span of forty eight hours with a heavy down pour measuring 994mm. Our Country was faced with the calamitous natural disasters in the form of Tsunami and the like two years back. Already our country is reeling under the depleted sharing potential of water resources intensified by the river water disputes. Today we get 1800 cubic litres of water on an average for per capita consumption. In 2050 this will come down to 1040 cubic litres. This will lead to a disastrous situation in drought prone States like Tamil Nadu which have to fend for water. As being projected if the sea level is to increase by about 40cm many coastal states including Tamil Nadu will have to face serious threat of sea erosion in a big way. This Global

warming and environmental degradation will lead to a great fall in Agricultural production affecting Agricultural Sector.

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*English translation of the speech originally delivered in Tamil.

In thirty years from now our major rivers and perennial rivers will have to face the problem of near extinction. There will be a two centigrade rise in temperature that will affect 30% of our agricultural production. 15% of production loss will be felt in the paddy cultivation due to two centigrade rise in temperature. This will lead to serious cyclical implication. As our Country is a populous country, the increased population has to share the limited natural resources that are depleted by the affected eco system. My esteemed colleagues who have participated in this discussion have shared their concern and offered suggestions while analyzing threadbare the causes and effects of Global Warming. Our Country is the one that has to bear the brunt. So the developed countries like USA which have caused this global warming in a big way must come forward to adequately compensate the losses of the developing countries. We must stress this point and we must also learn from the mistakes of the developed world and must adopt suitable technologies to circumvent the problem of Global Warming. Conservation of energy, conservation of water, conservation of power, use of gas as transport fuel, use of petrol mixed with 5% ethanol will all help us to save ourselves from the ill effects of global warming.

Thanking the Chair for this opportunity, I conclude.

SHRI K. FRANCIS GEORGE (IDUKKI): Sir after the speeches of my esteemed and senior colleagues, a gloom has spread across the House. In fact, I was finding the hon. Speaker, who was Chairing before you, was the only happy and relaxed person. It is not because of the doomed

scenario that is painted by all the earlier speakers, but I am sure by the seriousness of the subject. He was very kind enough to take it up immediately when we had raised it last week that it should be put up in the Agenda. The hon. Speaker mentioned that this issue will be given a lot of time. He has kept his words and the House is grateful to him.

Sir I am sure that after the eloquent reply of the hon. Minister, the gloom will disappear and rays of hope will emerge.

Sir, the UN Inter-Governmental Panel on Climate Change is a body of 2,500 Scientists from 130 countries. This body also predicts a very doom's day picture as far as this global warming is concerned, if not combated immediately. This body says that we have reached a stage where it is immediate rather than urgent in addressing this issue. This body of Scientists predicts more droughts, heat-waves, rains and slow rise in sea levels lasting more than thousand years.

Sir, India is one of the most vulnerable parts of Asia with regard to the ill-effects of global warming. There is going to be substantial risk to human health in Asia in the field of malnutrition, diseases like diarrhea, cardio respiratory diseases and excess heat-stress related mortality. It is said that there is going to be 20 to 30 per cent species face extinction if temperature rise two degrees centigrade above average. There is going to be heat-waves, floods, storms, fires and droughts and glacier retreat which are going to affect millions of people. The sea level is going to rise. The production of foodgrains will drop in India and China. … (*Interruptions*)

MR. CHAIRMAN : Global warming is applicable to the House also.

SHRI K. FRANCIS GEORGE : In Africa, it is predicted that 75 to 250 million people will be facing water scarcity. Sir, ultimately the world's climate zones are going to change. So, we have a real problem before us. I am not going to take much time, but I want to draw the attention of the hon. Minister to one point relating to the Kyoto Protocol. This protocol is going to be the guiding spirit in combating this threat of global warming. There is a provision for clean and development mechanism in this. I would request the hon. Minister that, when he attends the next Conference, we will have to review this provision. Why am I saying so? It is because this particular provision is defeating the very objective of the Kyoto Protocol. Carbon dioxide is the major villain. According to this particular provision in the Kyoto Protocol, companies can gain credits called carbon credits by adopting cleaner technologies. These carbon credits are measured in units of certified emission reduction and companies gain these credits by adopting cleaner technologies.

There is a provision in this particular aspect that companies from developed countries can meet mandated green house gas reduction under the Kyoto Protocol by buying carbon credits from other nations. Our Environment Secretary is on record saying that India is going to gain Rs. 10,000 crore by way of carbon credits. That means, we are going to sell carbon credits which we have earned by our efforts to developed nations like the United States of America or other European nations. The United States of America is the largest emitter of 30 per cent gas when we take the global emission rate. India's emission rate is only 3 per cent. We avoid these emissions. We earn carbon credits and we are going to sell these carbon credits to the United States of America. That means, the United States of America will continue with its emissions and meet its obligations under

the Kyoto Protocol. This is written here. I would request the hon. Minister to examine this particular aspect and, I think, we should strongly object to this particular provision under the Kyoto Protocol and say that all nations throughout the globe – developed and developing – should meet all the conditionalities that have been put forward by the Kyoto Protocol instead of meeting these through the back door by gaining on the hard work of developing nations.

Sir, I would request that India should not try to earn money through this route which will only add to the problem and will ultimately defeat the very purpose of this particular effort. So, I would request the hon. Minister to put up India's stand very firmly in the next Conference and I hope the hon. Minister will do it to the best of his ability.

Sir, I, once again, offer my thanks to the hon. Speaker for listing this very important subject for discussion in the House.

श्री टेक लाल महतो (गिरिडीह): सभापति महोदय, आज सदन में बहुत ही महत्वपूर्ण विाय पर चर्चा हो रही है। धरती का वाता वरण इसलिए भी गर्म हो रहा है, क्योंकि वृक्षों की अंधाधुंध कटाई हो रही है, जिससे सूरज की किरणें सीधी धरती पर आ रही हैं। वृक्षों की अंधाधुंध कटाई होने के कारण, वार्ा भी पर्याप्त रूप से नहीं हो पा रही है। वैज्ञानिकों का कहना है कि धरती पर कम से कम 36 प्रतिशत, यानी एक जगह 100 एकड़ जमीन पर जंगल अनिवार्य होना चाहिए। मैं समझता हूं कि 100 एकड़ तो क्या, दस एकड़ भी जंगल कहीं दिखाई नहीं देता है। मैं वन मंत्री जी से कहना चाहता हूं कि वनों की बढ़ोत्तरी के लिए योजनाएं तो काफी बनाई जाती हैं और प्रत्येक वार्ा करोड़ों रुपए पौधे लगाने पर खर्च किए जाते हैं, हेक्टेयर के हेक्टेयर क्षेत्र में पौधे लगाने की बात होती है, लेकिन वास्तव में देखा जाए तो एक भी पौधा कहीं लगाया हुआ नहीं मिलता। इस तरह पैसे का दुरुपयोग होता है। विश्व बैंक से भी इस काम के लिए हमें पैसा मिलता है। उसके बावजूद भी पौधे नहीं लगाए जाते हैं। दूसरे, कल-कारखाने भारी तादाद में लगाए जा रहे हैं, जिनसे कार्बन डायऑक्साइड निकलती है और ऑक्सीजन खत्म हो रही है। इससे भी पर्यावरण की समस्या उत्पन्न हो रही है। यह भी देखने में आता है कि जहां कल-कारखाने लगाए जाते हैं, वहां पर्यावरण मंत्रालय द्वारा उन्हें आसानी से लाइसेंस दे दिया जाता है। इस तरह से लोग कारखाने लगाकर वातावरण को प्रदूति कर रहे हैं। [R39]

19.00 hrs.[r40]

सभापति महोदय, मैं कहना चाहूंगा कि जंगल पर जब तक हम पूरी तरह से ध्यान नहीं देंगे, जंगल नहीं बचेगा। जिस तरह से सरकार ने यह संकल्प लिया है कि 6 से 14 वार्ा तक की आयु के बच्चे का अनिवार्य रूप से स्कूल में नामांकन किया जाना चाहिए, उसी तरह से भारत में बसने वाले प्रत्येक मनुय के लिए यह कानून होना चाहिए कि प्रत्येक वार्ा वह पांच पेड़ अवश्य लगाए। वन विभाग की ओर से जो पेड़ लगाए जा रहे हैं वे जमीन के पानी को सोख लेते हैं। यूकेलिप्टस का पेड़ जमीन के पानी को सोख लेता है। इसलिए सरकार को चाहिए कि वह बड़, आम, कटहल के अधिक पेड़ लगाए, जो सूरज की विौली किरणों को धरती पर आने से रोकते हैं। इसलिए मैं माननीय मंत्री जी से कहना चाहूंगा कि सरकार फलदार वृक्ष लगाए।

MR. CHAIRMAN : The discussion will continue tomorrow. The remaining speakers will be called tomorrow before the hon. Minister replies to this debate. Their names will be on the list.

… (*Interruptions*)

MR. CHAIRMAN: If you have given your name, it will be on the list.

MR. CHAIRMAN: The House shall now take up matters of urgent public importance.